

NOVEMBER, 1871.

The Southern Planter AND FARMER



VOL. VIII.

NEW SERIES

NO. 11.

J. W. RISON

Richmond, Va.



THE SOUTHERN PLANTER AND FARMER.

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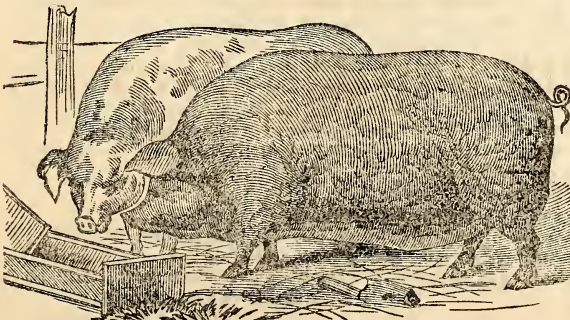
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Leave Washington daily at 6:55 a. m. and 5:30 p. m., and Alexandria at 8:00 a. m. and 6:50 p. m., arriving at Lynchburg at 5:05 p. m. and 4 a. m.

Leave Lynchburg at 9 a. m. and 10 p. m., arrive at Alexandria at 5:25 p. m. and 6:25 a. m., and at Washington at 6:15 p. m. and 7:25 a. m.

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July—1st

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At Millboro' for Bath Alum Springs, 10 miles; and Warm Springs, 15 miles.

At White Sulphur Springs for Lewisburg, 9 miles; and Charleston, 109 miles.

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JANUARY 1, 1871.

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Amount of property insured.....	\$6,405,432 74
Amount of Deposit Notes deposited with the Company.....	273,788 18
Amount of Cash Premiums and Fees received.....	150,634 94
Amount paid for Losses, Expenses, Salaries, Commissions, &c.....	93,181 54
Losses adjusted not due.....	13,332 00

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Should we find we cannot buy fertilizers and implements at fair and moderate prices we, by our charter, are empowered to manipulate and manufacture. We are also empowered to build our own sail vessels and steamers; should we find we cannot have freighting done at fair prices, we can use said privileges; we have numerous other privileges in our liberal charter, which we do not at present propose using, but would refer farmers for further information to our agents on the Fair ground, or in the city, who will give you copies of our prospectus, charter, constitution, and by-laws, and receive and receipt for subscriptions to stock.

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“ Baltimore.....	4.15 A. M.
“ Washington.....	7.00 A. M.
“ Richmond.....	3.00 P. M.
“ Greensboro'.....	12.32 A. M.
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“ Columbia.....	12.50 P. M.
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“ Greensboro'.....	1.00 A. M.
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THE SOUTHERN PLANTER & FARMER,

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Agriculture is the nursing mother of the Arts.—XENOPHON.
Tillage and Pasturage are the two breasts of the State.—SULLY.

JOHN W. RISON, EDITOR AND PROPRIETOR.

New Series. RICHMOND, VA., NOVEMBER, 1871. Vol. V---No. 11.

Agricultural Department.

Review of the October Number.

BY OLD IRON.

Again the bright face of the *Southern Planter and Farmer* greets us. We welcome it, and cheerfully undertake the task of passing judgment upon its contents.

The Editor begins by giving some good advice in relation to pro-vender for stock for "the coming winter." His remarks are timely, and we hope our farmers will not forget them. This is a matter that many have been too prone to neglect, as is evidenced every Spring by the numbers of half-starved animals that we meet with on every hand, and for which the buzzards obtain quick bills of sale. The Editor is right, and has done his duty in speaking for the poor animals in time. We sincerely hope that farmers will do *their* duty too, and make ample provision, not only to feed, but also to shelter, in warm, comfortable quarters, all their stock. Your own interest, friends, demands it.

Green Crops (continued).—Here is an article of the right character. It cannot be too highly commended. We find scarcely an idea or a sentence that we do not heartily subscribe to, and the lessons advanced, if heeded, will result in great and permanent good to our dear old State. For our *part*, of the two—peas or clover—for ma-

nurial purposes we prefer the peas, and for the reasons that "Nansemond" himself gives. It is the one that will be most likely to be used by the majority of farmers; it will thrive on poor land, while land strong enough for clover must be taken for other crops.

Communication Read before the Goodwyn Agricultural Club.—This paper of Mr. Taylor's, occupying over four pages of the *Planter and Farmer*, seems to have been called out by a remark of ours made in the June No. of this paper. It is our province to expose what we believe to be errors, let them originate where and from whom they may; and we are sorry that our friend Mr. Taylor has thought it necessary to use so much printer's ink in defence of his position, and a position that he must still excuse *us* for deeming "untenable." We presume few will deny that Southern farms are spread over too large an area; that it would be far better to reduce the surface and increase as rapidly as possible the productive capacity of that cultivated; but in this reduction of area it would not be wise to throw out any that "were yet remunerative." We do not advocate the abandoning of any land to briers and broom straw that will pay us for cultivation; but all know, and Mr. Taylor among the rest, that there are thousands of acres of land cultivated here that do nothing like pay the costs of labor bestowed. We contend that all such, if no better use can be found for it, should be turned over, for the time being, to pine bushes, and that all manures at hand should be applied—*thickly*, so far as it would go—to land that "were yet remunerative." We do not believe that this course would reduce the amount of crops in the least—believe that they would be increased thereby. But we have not space to go further in this argument now.

But the worst feature of the case is that Mr. Taylor seems to regard our criticism as "derogatory and contemptuous in terms and form." We are surprised at this view of our remarks, and so because we had no idea of intending such a thing in our words. Far be it from us to speak "contemptuously" of such men as we believe compose the Goodwyn club. We were surprised at the *idea* advanced, because it came from an intelligent mind, or we were surprised that an educated Southern farmer should advance an idea that we thought confined to the anti-book men. Do not regard us, friend Taylor, as aiming to be at all personal in *what* we say. We aim to speak respectfully, at the same time candidly and freely, of every article that comes before us. Please excuse us for occupying so much space hereon.

Clover and the Grasses.—Another voice advocating the cultivation

of clover, grasses, roots, etc., that all of us would do well to heed. We hope Duncan, Nansemond, and others will continue to agitate the subject. It is *the thing* we need.

Virginia—Manufacture and Product.—D. S. C. has spoken well and wisely. It is gratifying to know that our people are preparing to meet the true issues of the day fairly and squarely. Speed the good work.

Land Sales.—We are pleased to hear of our lands being settled up by such families as we suppose those here mentioned to be. We have room for many more such. But we cannot see in the indiscriminate immigration scheme—taking all that we can get, of whatever character—as possessed of all the blessings that some seem to suppose. We believe that foreign influence is one of the greatest dangers that threaten our country. We would always welcome such settlers as are mentioned in this article, but we believe that a large majority of those who seek a home on our soil do us far more harm than good. We can get along with our present population very well. Let us wait for the natural increase of population, and the gradual immigration of men of sterling worth.

Proceedings of the Goodwyn Club.—Mr. Hester's way of building a potato house is about the same as that practiced here. If convenient to get, we should have used saw-dust instead of dirt for filling the spaces. The fire daily is troublesome, and we do not regard it as at all necessary. We believe it best to exclude the light. Packing away and covering with saw-dust is a good plan. We are sorry that Mr. Davis has had such bad luck with his potatoes. Some of the Club would act a friendly part to instruct him what to do.

Corn-Growing—Reply to Old Iron.—Here is another bomb from the Goodwyn camp. Those chaps are touchy fellows, and "sticky" too. Well, we like to see men stand up in their own defence. Our friend will pardon us for failing to see any additional argument that he has advanced in support of his system. Perhaps he will think *us* obtuse this time. He wants to know "how a coulter can cut roots when there are no roots." But Tar-Heel *said* they were there. If we blundered Tar-Heel was holding the light. We would like to eat a "potato pudding" with Tar-Heel, but we can't see what eating a pudding has to do with corn roots. Has he ever tried a plank between rows of corn? Old Iron has wed many a hill of corn, and has pulled up many a vine and corn-stalk just to see how the roots grew, and he believes that he is "familiar" with them. But we have no desire to undertake a "dialectic tilting match," and have no room in a brief paragraph for extended reply; therefore we leave the sub-

ject for the present. As to W. O. G.'s proposition to decide the dispute "after the Virginia fashion," we would say that it is entirely fair, but we never engage in games of chance.

One of the Problems of the Century.—A long article but full of interest, and well worth careful perusal. The writer presents the matter in a startling light, though a true one. But how shall we avoid this great waste that the cities entail upon us? In this wise, we think: let every city own its own farm or farms, worked for the benefit of the city. Then let every citizen thereof be allowed to pay their city taxes in ashes, night-soil, and such other manurial waste as might accumulate on their lots, so much a load or barrel for each load or barrel delivered. In this way every inhabitant would be pretty sure to save up everything of this class that might arise from day to day. These things properly used upon a well-managed farm, would, we believe, return a handsome profit to the city in corn, vegetables and fruits, to be again consumed and again returned to the soil. The sanitary condition of the towns would certainly be improved, perhaps idle labor would be set to work, and in many respects we think that the *tone* and *nerve* of the body politic would be improved. We hope city authorities will make a note of this item, and put their heads together to see if they cannot do something to return to the farm at least a tithe of what they have taken from it.

The Ham Question.—Let's see; are we right? Yes, it is the *ham* question. Well, we like to be around when the ham questions are discussed, especially if there is a chance of getting a slice. Our chances for a slice, however, are not as good as ye Editor's; we shall be glad to hear of the result, whatever it may be, if *we* get no more than a *paper* ham. We want the competitors to tell us exactly how they cure their hams, and how they raise them. We do not think there is much in breeds. The secret lies in the *management* of the ham before and after it is a ham.

Poultry Department—Inquiries Answered.—Mr. L. is doing valuable service. We read his department with a great deal of interest. Poultry is our hobby just now. Does Mr. L. think it is a *safe* one? We honestly think that a page or two more of our good old *Planter and Farmer* should be devoted to this highly important subject.

Bees—By W. R. Polk.—An interesting paper. We join heartily in the call to the "home folks" to write for our home journal. Transpose the words "agriculture" and "apiculture" in last sentence.

The Household.—Having made our ramble through the fields, the workshops, the poultry-yard, dairy and apiary, we have at least

reached that province—best and brightest of all—where Mrs. A. M. dispenses her blessings and good things with wisdom, grace and liberality. Her suggestions this month are more than usually good and useful. The lovely damsels of Old Virginia may here find far better food for thought than in the love-sick, sensational trash of many of the papers and magazines that flood our country.

Horticultural Department.—This department this month is filled entirely with the proceedings of the 13th session of the American Pomological Society. We have read it with a great deal of interest, and much regret that we could not be present to witness for ourselves the grand display of fruits from so many sections. While reading the reports, we are forcibly convinced that the display of Virginia fruits, and of the South generally, though fine, was by no means as large and varied as it could and should have been. But the initiatory step has been taken; and in a few years, if the good work is allowed to go on, Southern pomologists will astonish the North and the world, at their large and varied displays of rich and luscious fruits. We trust the Southern fruit-grower will ponder well the instructive lessons contained in these highly interesting proceedings.

Change of Ownership and Editorship.—We perceive that the *Southern Planter and Farmer* has changed hands from Messrs. Ferguson & Rady to Mr. John W. Rison, sole proprietor. We regret to part with the former owners and editors, who have treated us so kindly since our connection with the journal as reviewer, and who have conducted the paper with so much ability; but we doubt not that Mr. Rison will sustain the high character of the magazine, and that he will soon take his place among the foremost rank of American editors.

The Necessity of Improving our Poor Lands—The Cultivation of Tobacco.

The cultivation of a large surface of poor land with hired labor is the “besetting sin” of our farmers in Eastern Virginia, and has had more to do with bringing about the present depressed condition of our people than any other cause. A vast deal of the arable lands of Eastern Virginia will not pay the cost of cultivation. And on a large portion of these the product is so small as to involve the unfortunate owner in serious loss. This is more particularly the case in the cultivation of corn. The cost of cultivating an acre in corn is estimated at from \$10 to \$12; and at that rate it requires a product of from two to three barrels per acre to pay the cost of cultivation.

Now it is well known that much of the land cultivated here in corn does not produce more than a barrel to the acre, and some not even that. Such a practice is ruinous, and it is folly to continue it. Now the great necessity that lies upon our people in this connection is at once to commence some good system of improvement. Our lands must be improved, or we will have to abandon them. The cheapest and most practical system that we can adopt is to grow clover. Fortunately for us, our lands are well adapted to the growth of clover. But clover will not grow on poor land without either manure or some good fertilizer, but these indispensable requisites are accessible to almost every farmer—notwithstanding the universal excuse about the want of means and capital. Almost every farmer here uses the fertilizers more or less, and can generally get all that he needs! Nothing else is wanting except the clover seed, which cost but little more. Then why is it that our people here do not at once commence this all-important work? The general excuse is the want of means. The real cause is the want of energy and enterprise. Our people must arouse themselves from this lethargy. They must take the agricultural papers, get up agricultural societies, and adopt more enlarged and liberal views generally. Let our large land owners, instead of employing overseers and doing nothing themselves, give their business their own personal attention. “The eye of the master is equal to two hands,” is a good old truism. When Adam transgressed in the Garden of Eden, and fell from his state of holiness, the divine command was promulgated, “Thou shalt eat bread in the sweat of thy brow.” Ever since then this has been the great universal law of our being. Indolence does not prosper. It does not promote our happiness or well-being, because it violates the divine command. Nothing valuable can be accomplished without labor and attention. In the exercise of these we have the promise of the blessing of God, and honest toil and industry will be sure to meet with their reward. Then let our people cheerfully adapt themselves to our altered circumstances. “Let them forget the things that are behind and press forward” with renewed energy and enterprise. We have the finest climate and the best country in the world, and though some of our lands are worn out and exhausted from improvident cultivation, they can be easily improved and made as productive as ever. Let our young men turn their attention to agricultural pursuits instead of seeking soft places, and sitting down in little country stores, wasting their lives in idleness, and falling into dissipated habits.

The best system that we can adopt for the improvement of lands in the tobacco growing regions, is to cultivate the tobacco largely,

and use the fertilizers freely on tobacco lands. Apply four, five, and even six hundred pounds per acre, so as to make the tobacco large and thus economize labor. Follow up the tobacco always with wheat and clover. In carrying out this system we should repudiate the old custom of keeping "standing lots" for tobacco, and bring new land in cultivation every year. In this way the system may be gradually extended, until the whole farm, or a large portion of it, is permanently improved. When this system has been gotten well under way we can cultivate the corn crops entirely on good corn fallow instead of cultivating this important crop as heretofore, on poor land that will not pay the cost of cultivation. The corn crop thus cultivated should be succeeded by wheat and clover, or oats and clover. In advocating a system of this kind, I would by no means lose sight of the necessity of making all the manure possible; we should make all that we can, and save and apply all that is made.

It is thought by some that the cultivation of tobacco requires too much labor to be profitable, and many persons have discontinued its cultivation in consequence. But the cultivation of tobacco can not be safely dispensed with here. It is our main money crop, and here at least, no other crop can be substituted in its place. Our attention must be directed to the best mode of lessening the cost of production. This is to be done by increasing the productiveness of the soil, by heavy manuring, and thus make large tobacco. It requires no more labor to make a large plant weighing half a pound than it does to make a small one weighing one eighth of a pound. The cost per pound may be greatly lessened in this way.

The first and the most important step in making tobacco is to have an abundant supply of plants and have them early. After having tried a variety of ways for the raising of plants, I have fixed upon the following one as the most successful that I have ever tried: After the bed has been thoroughly prepared and seeded, I give it a heavy top-dressing of fine, well-rotted stable manure. The manure should be applied *plentifully*, so as to have the bed uniformly covered by it. The advantages of this treatment are—first, it obviates the necessity of covering the bed with brush; secondly, the manure protects the young plants as they come up, and by its gradual decomposition furnishes food for them, and lastly it causes the soil to retain its moisture. Some persons hoe the manure in before the seeding, but this should not be done, as it keeps the soil too open—the young plant requiring a clean, compact soil. Should the plants at any time seem to be progressing too slowly, give them a top-dressing of some good fertilizer.

"SOUTH SIDER."

Liberal Farmers.

A close, mean-fisted farmer, is one of the characters sometimes met with, but of which there should not be one in existence, for if there is any occupation in the world that should teach liberality, it is that of agriculture. We do not, by this, mean that a farmers' occupation is so remunerative, that he can afford to be wasteful of his means, or that he should indulge in the extravagances of so many wealthy ones of the land, but there is that in his own vocation which demands a liberal spirit.

The farmer should be liberal in the purchase of the best implements. It is false economy to suppose that work can be as well and cheaply done with inferior, as with superior implements and machines.

He should be liberal in the matter of seed purchasing. There is no method by which a farmer can so readily illustrate the old adage of "saving at the spile and wasting at the bung-hole," as in the selection and purchase of seed. If he buys inferior seed he not only buys weeds that may ruin his land, but he cannot hope to have good crops from such a source.

He should be liberal in feeding his stock. No greater mistake can be made, than that it is economy to stint horses, sheep or cattle. A poorly fed horse will not do near so much work as one well cared for. Cows that are stinted in pasture or in stable, cannot be expected to give any other than poor milk, and small quantities at that. Hogs that are but half fed, never grow fat, and their meat is tough and dry.

He should be liberal with his working-men. The farmer who stints his laboring men at the table, or who tries to exact from them more than a fair day's labor, will be the loser in the end, for men thus treated will have their revenge in some shape or other. It may be set down as an unalterable fact, that a liberal spirit manifested towards the employees of the farm is always repaid in the greater amount of and better quality of the work done.

He should be liberal in regard to publications devoted to the interests of agriculture. The farmer who feels that he is too poor to take two or three of the leading agricultural journals must be poor indeed. We would not like to prophecy wealth for such a one. In these days of scientific progress, no man who desires to keep pace with the improvements of the age, can afford to do without the very best agricultural and horticultural newspapers. They are as essential to his success, as horses, implements and good seeds.

He should be liberal in the use of manures. As well expect

“grapes from thorns or figs from thistles,” as good crops from poorly manured lands. A soil can be starved as well as a man, a horse or an ox. Without liberal manuring successful farming is impossible. He should be liberal to himself. Honest and patient industry are among the indispensable requisites of success, but there is such a thing as being too industrious. A farmer who toils without stint, who feels that every hour devoted to pleasant recreation is an hour lost, and who labors from early dawn to dark night, wears himself out prematurely, and wholly unfits himself for the true enjoyment of life. Be industrious, be persevering, but do not forget that the Psalmist has told us, “There is a time to work and a time to play.”

Be liberal in all your doings, and you will find that the liberal spirit waxeth rich.—*Journal of the Farm.*

Various Opinions.

FALL TREATMENT OF CLAY LANDS.—A clay soil under a proper mode of treatment is our most productive soil. What is called an agricultural clay, that is, clay with twenty-five per cent. of sand in intimate mixture with it, is the best and most lasting soil for grain and especially grass. But while a light loam is comparatively safe from injury, a clay soil can be measurably ruined by improper treatment. And the greatest danger is to be apprehended from plowing when too wet. The working of clay in a moist condition will bring it into a state of tenacious consistency that frost cannot overcome, and many years of tillage will be required to reduce. In the mean time its value is lessened and its fertility impaired. Draining such soils is necessary for their proper cultivation; inasmuch as it often becomes necessary to work them before they can naturally get rid of an excessive amount of moisture. Farmers cannot be too watchful of clay lands at this season of the year, lest one unseasonable plowing should cause a serious injury. Here is seen the advantage of draining. While one farmer is enabled to keep his men and teams at work and seize a favorable opportunity for forwarding his operations, his neighbor, having an undrained farm, is compelled to lie idle and loses both time and money. The capital invested in drains returns interest in other ways than by increased crops.—*Hearth and Home.*

SMALL FARMS.—We have frequently advocated the dividing up of the extensive farms that were profitable under our former system of labor, but now are actually valueless to their owners; and the following, among other arguments, may be urged for its adoption:

Small farms make near neighbors; they make good roads; they make plenty of good schools and churches; there is more money made in proportion to the labor; less labor is wanted; everything is kept neat; less wages have to be paid for help; less time is wasted; more is raised to the acre, because it is tilled better; there is no watching of hired men; the mind is not kept in a worry, a stew, a fret all the time. There is not so much fear of a drought, of wet weather, of a frost, of small prices. There is not so much money to be paid out for agricultural implements. Our wives and children have time to read, to improve their minds. A small horse is soon curried—and the work on a small farm is always pushed forward in season. Give us small farms for comfort; aye, and give us small farms for profit.—*Tennessee Agriculturist*.

THE POOREST FARMING IN THE COUNTRY is, I believe, as a general thing, to be seen just outside the limits of our interior cities; just as the best farming, or at any rate the most showy and expensive, is to be observed just beyond the limits of great cities. It seems that when a farmer of the west lives just near enough to an interior city, town, or railroad station, to be able to visit them and return the same day, say within a five-mile limit, he is pretty apt to do so, and his farm suffers accordingly. Beyond the five-mile limit, daily getting into town becomes more difficult, but still may be achieved, and consequently better improvements and neater farms are to be seen between the sixth and tenth mile limit, than between the first and the fifth, though the maximum of neglect occurs between the third and fourth mile; while the maximum of neatness and order and thrift may be best seen between the ninth and the fifteenth mile. I state these facts as curious and amusing examples of how much we are all of us creatures of circumstances and situations, and as a way of warning travelers and sight-seers that they cannot well judge of a country unless they go beyond the third or fourth mile limit, and even to the tenth or fifteenth.—*Cor. Country Gent.*

ECONOMY IN FARMING.—Joseph Harris, of Rochester, says that a grindstone, set true, and run by horse-power, for grinding tools, hoes, spades, and plow coulter, will pay for itself in a month. He makes his men grind their hoes every morning, and take a file into the field to sharpen them when they become dull. His men think it extravagant to grind away the hoes; but he can buy a dozen hoes for less than he pays one of them for a week's work. Tools cost nothing in comparison to labor. It does not pay to give a man a dollar and a half a day to load manure with a dung-fork with one or

two teeth out. A dull, rusty hoe will cost more in a week than a dozen new ones. Good working horses are cheaper than poor ones. A man and team cost about \$600 a year, and it is poor policy to save \$100 in the original purchase and lose \$200 or \$300 yearly in the amount of work done.—*Exchange*.

AGRICULTURAL ASSOCIATIONS.

Few things contribute more to the advancement of agricultural interests in a community, than a properly organized and a well conducted farmers' club. It leads culturists into experimenting and improving themselves, that they may effectually assist in carrying out the objects of the association by improving others; and the result of these experiments and improvements of, say twenty or thirty persons, make, when thrown together as a whole, a weekly or monthly collection, as the case may be, from which it were strange if each member was not able to choose some things of direct benefit to him in his calling.

We have strong faith in farmers' clubs, both as a stimulus to the acquirement of knowledge, and as a school of practice for imparting it; and we would like to see them find an existence in every nook and corner of the country, and especially in every nook and corner of the South. We need them in the South; not that our farmers are lacking in a good *general* intelligence, but because they are deficient, nevertheless. Taking them on an average, our section can already boast the best informed set of culturists in the world; but, unfortunately, their information does not invariably run in the right direction to be of most value to them at this time. Heretofore they were not necessarily brought hand to handle with the plow, so they depended on other arms and other heads to manage the affairs of the farm, while they employed their "excellent leisure" in the acquirement of knowledge seldom connected with agriculture. As the tables have since turned this information is practically a dead letter, hence the necessity of a new schooling, and the tracing out of new channels for thought and new fields for action. In this recently inaugurated era the Southern farmer must be his own husbandman, else failure will be likely to follow his own efforts, for the late ordeal has left few, willing to be employed, who could be safely entrusted with the exclusive management of a farm.

Now, as the long evenings of winter are fastly approaching, is a good time to organize farmers' clubs.—*Illustrated Journal of Agriculture*.

The Walker Agricultural Club.

The Walker Agricultural Club met at Dr. Sterling Neblett's, Jr., and organized by electing the following officers: President, Mr. James Walker; 1st Vice-President, Dr. S. Neblett, Jr.; 2d Vice-President, Col. John L. Cralle; Secretary, Wm. M. Bagley; Treasurer, Capt. James Featherstone.

Quite an interesting and spirited discussion was entered into on the subject of the cultivation of wheat, in which all the members participated. The meeting was very pleasant, and the club promises to be a complete success.

On motion, it was resolved that the Secretary be instructed to open a correspondence with manufacturers of all the leading fertilizers, and request them to state the most favorable terms on which they will furnish the club with their fertilizers.

The following members of the club were appointed delegates to represent the club at the several approaching Agricultural Fairs: To the Mecklenburg Fair, Capt. J. R. Featherstone; to the Richmond Fair, Wm. M. Bagley; to the Petersburg Fair, Col. John L. Cralle.

The club then adjourned to meet on the last Thursday in October, at the house of Mr. R. A. Blackwell.

JAMES WALKER, *Pres't.*

W. M. BAGLEY, *Sec'y.*

King George Agricultural and Pomological Club.

The farmers of King George met at the Court House October 5th, for the purpose of organizing a county club, having for its object the promotion of agriculture, and thereby give more light to its farming interest.

On motion, Major Jno. D. Rogers called Dr. H. D. Ashton to the chair, and Mr. Frank C. Fitzhugh was appointed Secretary.

Resolved, That this be called the "Agricultural and Pomological Club."

The following gentlemen were unanimously elected officers for the ensuing year:

Dr. Richard H. Stuart, President; Mr. J. F. Dickinson, Vice-President; Mr. Frank C. Fitzhugh, Secretary; Mr. H. Byrd Lewis, Treasurer.

On motion, the club adjourned to meet at King George Court House on Saturday, the 11th day of November, 1871, at 11 o'clock A. M.

Dr. H. D. ASHTON, *Chairman.*

F. C. FITZHUGH, *Secretary.*

National Agricultural Congress.

In August last Gov. Senter, of Tennessee, forwarded to all the Governors of all the States and Territories of the Union a circular soliciting their co-operation in a movement to inaugurate a National Agricultural Congress. In that circular Gov. Senter said:

"While there is no branch of our national industry so large or so important, there is none that has received at the hands of those engaged so little of combined action in its behalf, and believing that a great public good in the interest of all portions of our common country will be accomplished by this Congress, I desire earnestly to invite your co-operation and your aid in having present a representative of your people."

The proposed Convention was held at Nashville on the 3d instant. A Constitution was adopted, the preamble to which recites the objects of the Congress as follows:

"To extend the usefulness of the various associations and societies organized for the purpose of promoting the interest of agriculture in the United States, and in order to create unity and harmony as well as concert of action in reference to those measures calculated to increase the efficiency of this, the most important of our national pursuits; and especially to secure the proper consideration of questions pertaining to the industrial and commercial interests of this large and productive class of our people."

The following officers were elected for the ensuing year: F. J. Lemoyne, of Pennsylvania, President; Enoch Ensley, of Tennessee, Oliver H. Jones, of Georgia, F. C. Johnson, of Indiana, John S. Marmaduke, of Missouri, John M. Billups, of Mississippi, G. C. Eisanmeyer, of Illinois, R. M. Patton, of Alabama, Robert Browder, of Kentucky, Duncan F. Kenner, of Louisiana, and Gordon N. Perry, of Arkansas, Vice-Presidents; J. B. Killebrew, of Tennessee, Secretary; and F. H. French, of Nashville, Treasurer.

St. Louis was fixed as the place for holding the next annual meeting. The time of meeting is the fourth Monday of May.

A resolution was adopted authorizing the appointment of a committee to prepare an address to Agricultural Associations of the United States setting forth the purposes of the Congress, and urging their co-operation therewith.

The following resolutions were offered by Mr. Haynes and adopted:

Resolved, That this Congress approves and adopts the following resolutions drawn by Commodore Maury, and lately adopted by the Agricultural and Mechanical Society of Memphis:

That the President of this Society be and is hereby instructed in behalf of the farmers of Tennessee, to petition the United States Government, through the State Department and the Executive, in favor of the establishment, by international co-operation, of a general and systematic plan of meteorological observations and crop reports, and to request the Government, in furtherance of this object, to invite the other nations to meet, in the persons of their leading meteorologists, at an early day, in conference *a la* that of Brussels in 1863, for the purpose of connecting with the plan now proposed the system that was there devised for the sea. 2d. For the purpose of arranging details. 3d. For the purpose, also, of providing for a general system of telegraphic meteorology and crop reports, to the end that our knowledge of the laws which control the functions of the atmosphere may be increased, and that accurate and useful forecasts may be made at frequent intervals, as to the weather and crops in all countries. The President of this Society is required to request that the United States Government will co-operate in this system of research by causing the plan that may be agreed upon in conference, to be carried out in this country, and to be adopted on board of the national cruisers.

Resolved, That the President of this Congress transmit a copy of these resolutions to the several State Governors and to each of the Agricultural Societies and journals in the country, inviting their co-operation, and requesting them to support this measure with their influence and with similar petitions.

Resolved, That this Congress requests each member of this body representing agricultural organizations, to present these resolutions before their respective Societies, and urge their co-operation in carrying them into effect.

It was further resolved that the editors of the various agricultural and horticultural journals of the United States be made honorary members of the association, and be respectfully urged to co-operate in furtherance of its purpose.

State Agricultural Society.

At a regular meeting of the Executive Committee of the Virginia State Agricultural Society, held in the city of Richmond October 10th, 1871, the President, Mr. Lewis E. Harvie, offered the following resolutions, which were adopted:

Resolved, That the sectional Societies of the State be invited to send delegates to the annual meeting of this Society, to be held on the 31st of October, to consider and adopt the wisest and most effi-

cient method of enlisting the practical co-operation of these Societies, and the farmers and mechanics of the State, in the promotion of the true interests of agriculture and the mechanic arts through the instrumentality of a State organization.

2d. That where the annual meeting of the local Societies have already been held, the President thereof be respectfully requested to appoint such delegates.

3. *Resolved*, That an invitation be hereby cordially extended to the Presidents of all local Agricultural and Mechanical Societies to attend our annual meetings and take part in the consultation above suggested.

4. That the Secretary cause these resolutions to be published in the city papers, with a request that they be copied in all the papers of the State.

On motion of General Lee, it was

Resolved, That at the next meeting of the Executive Committee the question of making the Presidents of the different Societies throughout the State *ex-officio* Vice-Presidents of the State Society be considered and the sense of the committee be taken upon the subject.

Resolved, That should it be the opinion of the Executive Committee that such action would advance the cause of agriculture and the interests of this Society, that they recommend to the general meeting of the Society such changes in the Constitution as would accomplish that object.

Piedmont Agricultural Society.

CULPEPER COUNTY, October 5, 1871.

Mr. Editor—It may be interesting to some of your readers to hear occasionally from this portion of the State. It ought to be of much interest to all, and there ought to be numerous correspondents of the *Southern Planter and Farmer* in all parts of Virginia. Every county should be represented that we may all know what is being done, and be brought closer together, and take more interest in each other, and in the general prosperity of the agriculture of the State. Everybody knows that we do not pull together enough. There has been sufficient individual effort wasted, since the war, to have produced ten times the effects that are now visible had they been concerted and concentrated. Let us then hear from every section what they are doing; what they wish, and what they expect to do.

It may not appear that we have done much in this county, and it

probably seems less than it actually is, from the cause above mentioned, viz: that we have scattered too much. But we have some farmers among us who are full of enterprise and energy, and they seem determed that progress shall take the place of lethargy—that the whole community shall be aroused and excited by their efforts for the general good. It is hoped and believed that much will be accomplished through the agency of the Piedmont Agricultural Society. This is a chartered stock company, consisting of a large number of farmers with a liberal capital subscribed. They have recently purchased an eligible location for their fair grounds, near the town of Culpeper, and are now engaged in laying out a track and constructing the necessary buildings. Their arrangements were not completed in time to prepare for a fair this fall, but will be ready in ample time for next year, when we anticipate a rousing gathering of the people of this and adjoining counties. In the meantime we expect to have frequent meetings of the Society for the discussion of all matters that pertain specially to our farming interests. These meetings, Mr. Editor, will need a mouthpiece, and, if agreeable to you, we will contrive to have them reported for the *Southern Planter and Farmer*, which will then become still more interesting to your increasing list of readers in the Piedmont section.

Hereafter I hope to tell you some interesting facts in regard to the farming interests of this section which is certainly equal to any in the State, and to which, probably, less attention is given than to any other portion.

SAMOHT.

Goodwyn Agricultural Club.

DISCUSSION OF THE LABOR QUESTION.

The Club met at the residence of Mr. E. H. Hicks, August 26, 1871, the president in the chair.

The proceedings of last meeting were read and adopted.

Upon the subject for discussion (Labor), Mr. N. A. Gregory first presented his views: I suppose, he said, the question will naturally resolve itself into this: "Which is best, the broad-acre, thin or no-manuring, old foggy, share system, or the progressive, high-farming, wages system?" Of course I sustain the latter, for really I can see but one beauty or advantage in the first system, and that is where gentlemen secure for themselves good, clever, accommodating "partners." They can occasionally have for a day or two the use of their muscle on individual account. Now that is all I can see to confess. This thing of stimulating, with an interest in the crop, is all stuff,

except so far as the desire to rid themselves of the presence of the white man, and the need of "hog and hominy" will carry it. A neighbor of mine has it in a nut-shell, I think, when he says, nothing but "hickory and hunger will make a nigger work." But my greatest, first, and foremost objection is, that it strikes at the very root of all successful, progressive farming, and that may be encased in the word "improvement." And what knowledge of this word, what desire of knowledge, I ask, can you put into the head of an individual whose first aim, whose one absorbing idea is by one year's successful cropping to change his condition and get from under the white man? He is taught this by his astute leaders, who so well know and dread the information imparted by his employer, and thus it is that the mere system of cropping is engendered. I ask these gentlemen to show me their grass lots, their clover fields, their barns with new shingles, their compost heaps, and their fences "horse-high, bully strong, and pig tight." The fallacy of these ideas upon broad-acre, thin-manuring, and share systems is so plain, I am almost tempted to stop here and ask gentlemen to come down from their classics and state their positions plainly, feeling it will be the best refutation, and worth more than all I could hope to say against them. To advocate this share system as a means of securing labor upon your individual farm is a consideration, and may be borne with; to advocate it as an expediency, it must take a farmer of the "new departure" stripe to do it; but to advocate it as a settled, fixed policy, under which we are to live, stamps it with the arrantest old fogysm. It is acknowledged that we find ourselves more directly in competition with the cotton planter of the South, and more and more of our labor each year is gone. I ask, what has had sway? what has been the general rule since the war? Nothing new; no, nothing at all but these same old ideas, and it is only of late that these gentlemen have been filled with fears that they are slipping away, and now I charge upon them, and to these old ideas, that they are, in a great measure, responsible for our agricultural status, and for the depopulation of our State, as they say, of the "very best labor in the world." Of course, if I scatter my manure thin, I can't compete with the cotton planter, but equally of course, if I cultivate improved, well manured land, I can compete successfully with him or any other planter. It is urged as being the safest and most profitable for the land owner. I hold that hard bargains never return any lasting good. It is as much a duty of interest with us to look to the condition of our laborers as it is the farm itself, and that is the way to give them interest and attachment, and keep them out of the hands

of the cotton planters. Ours is a hill country, and what soil we have must be preserved. It requires good plowing, good cultivation, and good manuring. * * My idea of the policy to be pursued is this: to hire for standing wages, and hire only enough to cultivate that land which can be made rich. I want tenant or share laborers only that I may occasionally hire them. Cultivating rich land will enable you to pay fair prices, and the condition of your laborers will in every respect be improved, and they will learn to bless and thank you for the good you have done them, and you, too, will stand a better showing to compete with the other classes, if you will only but learn to combine with your neighbors and put down high taxes and railroad freights. We need more of the heaven of concentration. We must have more working together. If I wished our country to prosper and improve, I would see the farm laborer, the share hand, the tenant, and the land owner as one family in ideas of interest, united in all things. Yes, united—with hands together, even through and across the dirty pool of politics. I wish those high in agricultural authority would preach this from the hill-tops. We have got fairs and the like, but they don't answer the purpose. We must have "rings," with a general head in each State, and through that we might make suggestions to the head of the "Department" said to be set apart for our especial benefit; and then we might go to Washington and demand to know in whose interest it was run.

The President called upon several gentlemen for statistics to support the share labor system.

Mr. E. H. Hicks thought the President mistaken in regard to some he had furnished some time ago, for he had long since quit share hands in disgust. He could see nothing good to come of it. Does not ignorance beget ignorance, and vice beget vice? It looked very much like virtue and intelligence surrendering to barbarism. It is an extravagant system and fraught with the very worst consequences. It is begging the question to say when "we make we make, and when we lose we lose but little." Has the system really any merit? There may be a few isolated cases of success. Let any gentleman start with this system, and no matter how rich and fertile his place may be, he can make it barren in six or eight years. What can we make of a partnership with an individual whose highest aim is a suit of "Sunday clothes?" Concentration is the idea—a few acres cultivated with profit. Concentrate your manure and your efforts. What would be the use of any of us sitting down and reading fifty or a hundred pages, and then when we get through be able to tell nothing about it, not profited at all? And so with running all over the farm and then be able to show nothing for your labor.

Mr. Davis said he agreed heartily with the President in his views upon manuring. He thought our soil would not admit of as heavy applications of manure as the "Yankees" made. Our suns were too hot and the manure would parch up and ruin any crop. He had tried working with the negro under almost every system, and he had finally concluded that there was less to be *lost* with him working on shares than in any other way. He asked Mr. Gregory, under his idea, what was to become of all the labor? It would be calculated to run it all out of the country. He was surprised to hear him say that he had any settled around him, much less to have them working on shares. He thought he had only a few under his immediate control.

Mr. Gregory said he claimed to be a special benefactor of the negro in this, that he sought honestly to better his condition. His plan was to pay good prices, and in this way induce them to leave off farming to themselves. He had them settled on the outskirts, and carried on at home a system of improvement, and as that increased he would be able to call more of them in. He did not look upon any of these plans as money making, but bore with them simply as a means of procuring labor.

Mr. Horner thought the question might be more appropriately discussed in another light, viz: What *kind* of labor shall we employ, negro or white man? He could not see how Mr. Gregory could speak of them as the best laborers, when so many plans had been acted upon, none succeeded, and we were all confessing to a downhill tendency. Farmers in the Northwest were growing rich, and if we had the same labor why can't we travel the same road? He believed the negro here received more in proportion for what he did than any labor in the world. Numbers of them supported large families (the labor of a single man), had time and money to educate their children, and yet, the farmer who employed them, in many cases, was not able to educate *his* children! What good will a man's money or position do him if, with the negro, it requires all the care and attention that Mr. Gregory says it does. I had as lief work myself as to be a constant supervisor. We must get labor that will work without all this persuasion and attention. I think Mr. Hicks clearly right upon the manure question. We must put it on thick, economize labor, make grass lands, raise stock, &c.

Mr. Cooper said this question will soon solve itself. But there is one thing—the labor is here, and it behooves young men of energy to lay hold and work it to every advantage. For us negro labor is far preferable to the foreigner. I think it can be employed

profitably, both on shares and wages—a few to work the best land for wages, and then share hands on the balance. We can't afford to come down. We can't make a decent support—can't live and move as we have been accustomed. Mr. Hicks, I am afraid, was badly whipped on the first hand. He failed to look to the number of dead heads he was supporting upon his farm. I have frequently remarked to the commissioners of the poor, in complaining of supporting the paupers of the county, that Mr. Hicks was then supporting double that number.

Mr. Gregory said he could tell Capt. Horner that his beau-ideal of a laborer was not in existence. A farm—and especially with our labor—demands constant personal attention. A farmer may keep his skin *clean*, but it must be a little *tanned*.

Mr. Chas. A. Gregory had employed native white labor since the war. He had found them quite tractable, better managers of stock and horses than negroes were, and he had frequently had them to do him a better day's work than he had ever got from his negroes when they were slaves, and without very much overseeing.

Both sides agreed that wages and share hands both might be employed; but Messrs. Taylor, Davis and Cooper advocated the share system as a money system, whilst Messrs. Hicks and Gregory thought it ought to be tolerated only as a means of procuring labor.

Capt. B. A. Capehart was present, and urged the members of the Club to take interest and an active part in the Central Agricultural Fair to be held at Henderson.

Upon motion of M. H. Hester, the Club adjourned to meet at his house the last Saturday in September.

NATH'L A. GREGORY, *Secretary*.

STOCK DEPARTMENT.

More Roadsters Wanted.

A writer in the Petersburg *Index* commends the "Virginia Hurdle Club" recently formed in Richmond for the purpose of improving the horsemanship of our men, and cultivating a taste for a high standard of riding horse, causing such animals to be more numerous and cheaper. Good riding horses are scarce. A buggy, with a tolerable trotter to draw it, or even a pacing pony to ride, may be scraped up for an afternoon excursion, but a good roadster, a hunter, an animal that under the saddle can prove the combination of endurance, activity, and speed, though formerly common in Virginia, is now rarely

found in her borders. It is mainly by athletic exercise as well as climate that the Englishman has been made the hardy being that he is, and it is from the demand for such an animal, and the consequent systematic breeding that the English hunter is the superb animal that he is. Why should owners of grass farms in the South waste time and money in trying to produce trotters of fabulous speed, when if, perchance, they should succeed, there is no use for the animals, because there are no suitable roads on which to display them; and there never can be good roads where there is no abundant hard natural material for making them. The stout roadster, on the contrary, is needed everywhere, and most so in Virginia; and for pleasure purposes, as we have said above, he should combine with stoutness, the other characteristics of activity and fleetness.

Treatment of Horses.

The Arab loves his horse only less than his wife and children, and the horse loves him quite as well, if not better than either. There is little that the animal needs to know that he does not readily and completely comprehend. What horses most need to make them both serviceable and safe are companionship and confidence. A good horseman talks to his horse, pets, if he sometimes punishes him, and when he does a meritorious deed conveys to him the fact that he recognizes and appreciates the service. Besides this, and better, he assures the horse that he has faith in him. He handles his feet, puts himself in positions where he might hurt him if he would, and, when any accident occurs, he tries to throw some responsibility on the animal, which the horse generally perceiving, accepts and governs himself accordingly.—*Hearth and Home.*

Cabbages as Feed for Milch Cows.

I have had a little experience in this line, and am highly pleased with the result; they come into feeding for milch cows after corn fodder has been killed by frost, and at a season of scarcity of other green food; their value as a milk producing feed, I think, stands fully equal to any other green food I have ever fed; and the product that can be grown upon an acre is very large. Probably the most difficult part is the storage for winter use. To get the most benefit with the least labor in storing and feeding, is the object (or should be) of those who raise any crop for green food for stock; hence it will be necessary to have some conveniences for storing and feeding

the crop after it is grown. For myself, I think the feeding should begin as soon as green corn fodder is injured by the frost; that is usually the last of September or first of October; the milch cows are then carried on with a good flow of milk, which is much better than to let them fall away, and then try to bring them back by high feeding. I find that in changing feed we should begin moderately, and increase, as the animals get used to the feed, to the full amount desired to be fed; then keep on steadily with that until another change is desirable, or of necessity must be made. Variety is of great benefit for all farm stock, and changes are often of great benefit to neat stock, more so than at first appears. The feeding of cabbages in connection with hay and meal, will be found very beneficial; at least such has been my experience for the past two years with them.—
Cor. Country Gent.

Wintering Calves.

It is a common belief among herdsmen that it is as much of a task to carry a calf through the first winter as it is the second. It has been a fancy of ours to handle calves for threescore years. About the first hard work we tried to do was to yoke up the calves and teach them to go at the word of command. In our boyhood it was the practice to feed them nubbins of corn or a few oats besides their hay, and when we began on our own hook we fed carrots, apples, turnips, and potatoes. Forty years' experience have convinced us that there is little trouble in getting through the first winter, if the calf is in fair condition to begin with. We prefer one or all the articles above named to grain.

Calves should have a place by themselves, where they can enjoy their food undisturbed by older animals. A good shed is indispensable; good early cut hay, and free access to good water, are equally important. Straw or leaves for bedding should not be overlooked. Now if you will visit them once or twice a day, always with regularity, with a quart apiece, if twice a day, of finely chopped carrots, you will be pretty sure to find them glad to see you, and ready for their rations. We give the carrot preference because experience has shown us that for a calf it has no equal. Regularity is more important with a calf than older animals, though it pays on all. With these provisions, we have scarcely failed in keeping our number as good in spring as in the fall. We have used a stable, but prefer a good yard and shed with a place where they cannot get on the food with their feet.

Nothing is more detrimental to a calf than to be exposed to the malicious horns of older and larger horned animals, who seem to take pleasure in hearing them bellow when pressed to the wall of the barn by their malice. It may not be amiss to say here that he is a wise herdsman who, in wintering his herds and flocks, is careful to provide for the weaker animals, by giving them a chance among their equals, or in a place where they can eat in peace and be at rest.—*Fredonia Censor.*

Fattening Sheep in Winter.

We believe the winter fattening of sheep, to be sold for the butcher the latter part of March or first of April, might be made a profitable thing for the farmer, even with the somewhat limited demand for mutton so general in our country. A few of our farmers have tried it in a small way, and are satisfied the hay, roots and grain fed, brings them a better return than it would if converted to money by any other means.

Whoever wishes to try it, should begin on a small scale, and learn the business from experience. Begin with a lot of fifteen, or at most twenty, and see how you succeed. Some essentials are to be observed at the outset, among them these: Have a good feeding shed, well ventilated and lighted, and provided with some sort of a feeding rack, constructed in such a way as to save fodder, which is indispensable. Furnish a supply of pure water, and keep salt, ashes, &c., where the sheep can have access to it. Keep the yard or pen well littered, that the sheep may have a dry chance to lie down. Absolute quiet is indispensable to fattening sheep. Mr. Jurian Winnie, an experienced sheep feeder of New York, found that sheep in a secluded shed, visited only to be furnished with feed, litter, &c., fatted much faster than those in sheds situated where there was considerable passing and re-passing. Feed clover hay twice a day, and barley, oat or pea straw once a day, at noon. For provender give corn, or corn and oats, with peas and oil cake, if not too expensive. Whole grain fed to fattening sheep has been found to give better results than ground grain. Give roots of some kind twice a week. The manure (and litter) of fattening sheep forms a most valuable fertilizer for light run out land.—*Maine Farmer.*

Quality in Pork.

We all know what a difference there is in pork. Breed has something to do in this matter, but not so much as many suppose. It is

the *kind* of feed that makes kind in pork. Use milk or whey largely, and your pork is sure to be soft, flabby, and will fry away at least half. What is left is not relishable. Hence our dairy pork is our poorest pork, varying according to the amount of grain that is fed. So still-fed pork is in bad repute. Miscellaneous feed makes ordinary pork, often quite ordinary. Slop will not do; there seems to be too much water.

The grains are what is wanted to make good, *sweet* pork, pork that is solid and will fry well. Rank pork is unendurable, and yet there is much of it, and some people like it, like the pork from large strong hogs.

A dirty, offensive sty is an element no doubt in producing strong or even fetid pork.

Have clean quarters, a clean animal, good ventilation, and feed grain. For drink give cold, not in any way foul, water. Corn for feed is the best, and old corn at that. Do not house too close, nor feed too sharp; look to the convenience of the hog; and fat him so that he is in good condition, not overfat, with possible diseased parts about him in consequence, the pork being affected by it.

Old corn submitted to heat will yield most pork, but it is doubtful whether the quality is as good as when fed raw. So probably with all the grains.

We have had chances to note clear distinctions in the quality of pork. Where the dairy is excluded and the grains are fed, there is good solid pork; and, unless the hog is old and large, we find it to be sweet. We find it difficult to get good pork among the dairymen, that is, pork that will not fry away too much, and is of a No. 1 keeping quality. This among all breeds, for all are kept here. We are fattening a pig for our own use, of mixed breed of Chester White and Berkshire, and we feed him old corn, ground, and give him water for drink. We expect the first quality of pork, and we shall not be disappointed. We have practiced this for years, and seen it practiced, and with unvarying success. The pork is always solid; cooks well in all forms; is sweet and toothsome, and more wholesome than the rank bacon. We have no difficulty in keeping our pork.—*Cor. Country Gent.*

MANURES.

Properties of Plaster.

Gypsum attracts. It is not only a manure in itself, but it attracts the manure from the atmosphere that comes in contact with it also;

it catches and holds the fertility of the ground that in some soils escape. Lime will do this—so will clay. Clay, dried and powdered, is an excellent thing to put on a barn-yard, or cover a compost heap with, or work through the heap; hence we use gypsum and lime in our stables and privies. Gypsum is best; it has the most attraction, besides other properties. A little should be kept by every farmer for use, even at a high cost, as the benefit is sometimes more important than the high price. But we waste our manure. We not only permit its strength to escape, but we are glad to get it out of the way. The same recklessness extends to the land. It is well our soil has a good proportion of clay to hold its strength. We must conserve. The time is not far distant when we shall be compelled to do it. Already there are symptoms of lack in our soil; we do not raise as heavy crops as we used to—here and there a field, here and there a farm is less productive. It is not so much that we need plaster here in the West to hold the strength of the soil as to use it to abstract it from the atmosphere, and to save the ammonia of our barn-yards and stables. For this let us always keep a little on hand. Let us save and improve our manure, and thus save our farms.—*Coleman's Rural.*

LEAVES FOR MANURE.—Forest leaves are another great auxiliary to the manure heap, and consequently “making the most money from the farm.” Every acre of forest leaves, when the rotten-mould is three or four inches deep, is sufficient to manure an acre in the field, equal, in my opinion, once every five years, to twenty loads of barn-yard manure. It contains two out of the four bases required for plant food, viz: potash and nitre; also a large amount of vegetable matter. I have heard of a man who lost all his farm but twenty acres, inherited from his father, by dissipation, and who, on concluding to reform, having no manure nor stock, collected, from a few acres of pine growth, the leaves and mould which he spread and ploughed into his worn out acres. By this means alone he brought the land up to a high state of fertility, so that it produced more than the whole farm formerly did.—*Chautauqua Farmer.*

LIME ON GREEN SWARD.—A writer in the Journal of the Royal Agricultural Society, describing the permanence of the action of lime, says that he knows a piece of ground containing 166 acres which formerly grew nothing but heath. A good dressing of lime was applied on the surface of the sward which has nearly doubled its value. This was done several years ago and totally eradicated the heath. The lime to this day appears in full action, as its effects

usually testify, from the richness and sweetness of the herbage, the texture of which has been entirely changed by the application of lime.—*Maryland Farmer*.

MULCH AS A MANURE.—An experienced farmer once found, by experiment, that where he mulched his wheat land with veitch, he had an increase of crop of twelve bushels per acre; and he invariably found that land which had been sheltered during the previous winter from the action of the atmosphere, frost, cold, etc., was always more fertile than any portion of his adjoining land, even under a high state of cultivation. Our use of mulch upon small fruits, also confirms the above theory, for a good mulch invariably increases the production from fifteen to twenty-five per cent., as well as contributing very materially to the size, color and cleanliness of the fruit. We believe that mulching will always pay.—*Horticulturist*.

VALUE OF MARL.—At a recent meeting of the Chuckatuck (Va.) Agricultural Club the subject discussed was: "Calcareous Manures: the value of marl as a fertilizing agent; when it should be applied; condition of land requiring it; action on the soil producing fertility; remedy when over-marled." Captain C. said that the practice of Edmund Ruffin in bringing up his land to the highest state of fertility, was by the use of marl and clover; when clover would not grow, he would use marl to make it rich enough to grow clover, and when Mr. R. had gotten all his land up to the highest state, he moved to another farm of old piney fields of the poorest class, for the special purpose (Captain C. thinks) of experimenting with his pet marl; cut down the pines, plowed with bull-tongue, and harrowed often, and by the use of marl (200 bushels per acre) brought the land up from 6 to 30 bushels of corn, this being always his first crop after clearing. In clearing woods, he would simply cut down the undergrowth, haul the marl on before belting large trees, two years after put in corn, and have fine crops. Captain C.'s own old field during the war had grown up in pines; he cut down the pines, let them lie two years, and then burnt up brush and hauled on marl, 200 bushels per acre, and it gave now the best corn he had ever raised on the land; he thought the marl had acted better than a heavy dressing of stable manure. Had found part of his lower field fired by over-marling, done by former owner 25 years before; would recommend clover and grasses as a remedy, and also long and coarse manure, which he had known to succeed with a neighbor.



Horticultural Department.

Catalogues of Fruit.

The first inquiry made by one about to plant an orchard is for a list of fruits adapted to his section; and as long as he continues to plant he will continue to need a revised list. How can correct and reliable catalogues be obtained? Two methods naturally suggest themselves: 1st. Special lists may be made by district and State Pomological Societies. 2d. A general catalogue can best be furnished by the National Society. It is to the combination of these two sources of correct information that we now call attention, in connection with the resolution offered by Col. Flagg, of Illinois, at the late session of that Society in this city. Heretofore any member has had the right to "star" as successful or very successful any fruit which by accident, or otherwise, had obtained a place on the catalogue, and in years gone by there was a fatal facility for getting names upon the list.

At this session there was a commendable disposition manifested to stop this indiscriminate recommendation of fruit, and the resolutions of Col. Flagg, which were adopted, are certainly a step in the right direction. Now let our State societies see to it, before each meeting of the National Society, that correct lists of fruit adapted to their latitude and soil be furnished to the chairman of the General Committee on Fruits of that Society; and while even this may not correct all the abuses of which there is so just a complaint, it will greatly alleviate them, and soon make the catalogue of the American Society, what it is not now, good authority as to value of varieties.

Discussions of the American Pomological Society.

One great advantage which will result from the new rule as to recommending varieties adopted by the American Pomological Society, will be that a much greater proportion of the time given to discus-

sions can be devoted to conference and comparison of views concerning the diseases, insects, and other obstacles to successful fruit culture.

Heretofore at least two-thirds if not three-fourths of the time of the Society has been taken up with what our confrere of the *Western Rural* calls a militia muster-roll of fruits to be "starred" by any and everybody. Now that the endorsement of a State society, or of at least three well known pomologists, is required to secure favorable mention of any variety; the usual call of the "roll" may be dispensed with, and the whole matter of revision of the catalogue referred to a committee consisting of members from each State. Such action will afford time for the proper discussion of subjects of paramount interest, such as pear blight, mildew, rot, orchard culture, curculio, "*et id omne genus*." It is at least as desirable to know how and why certain varieties succeed in certain localities, and why they fail in others, as it is to be told (frequently by irresponsible parties) that they are or are not profitable.

While we do not think that the late session of the American Pomological Society was more of a failure than its predecessors as to the amount of information gained and distributed, still we think the Society has always failed to give a sufficient portion of its time to diseases, insects, climatic influences, and kindred subjects. Let us hope for an improvement at the next session in Boston.

The Next State Fair.

We are happy to learn that the prospects for an exceedingly fine exhibition are unusually good. The entries already made in the stock and implement departments are beyond those of any previous year, and we anticipate a good turn out of our people from all parts of the State. We also have ground to hope for a good exhibition in the horticultural and pomological departments, although candor compels us to say that the premium list is not as full and attractive as the importance of the subject demands, nor are the special articles, for which competition is invited, arranged with much care. This may have been excusable in years gone by, but now that the fruit, vegetable, wine, and flower interests have assumed such prominence in our State, the neglect calls for a word of criticism. In future we hope to see more prominence given to these interests by our great State Association, and in the mean time urge our fruit growers, gardeners, and florists to show that they are entitled to such consideration by making a large and attractive exhibition of fruits, flowers, and vegetables.

Fall Apples—Roots—Virginia.

WASHINGTON, October 16, 1871.

Mr. Editor—In this short article I propose to make some brief suggestions on matters from top to bottom—on branch and root. It is now about the season—last of October and November—for securing winter apples for next spring's use; and *roots* to feed stock during the winter; and no part of a farmer's many operations can be more profitable than raising plenty of *ROOTS*—as carrots, beets, and turnips, as a good practice for restoring or preserving fertility of land; while feeding them to all kinds of stock, including horses and sheep is highly beneficial, as I have proved by many years' use. Few persons who have not tried it know the value of feeding a few carrots daily, through the cold weather, to horses; it keeps their digestion good, makes their coat smooth and bright, and keeps them more lively. During the warm part of the year they get more or less green, moist feed, which tends to healthiness; then, on the approach of cold weather, they are put on exclusively dry feed, which is injurious, when they need a continuance of some succulent feed, to keep up a good condition; and for horses nothing is so good as carrots—say about a peck a day—and horses like them very much; they also soon learn to like beets. Cows give more and better milk when they have carrots or beets daily. In the West we used to raise from three to five hundred bushels to the acre very easily, at a cost of from six to ten cents the bushel. Turnips are good for all except milch cows—but are apt to give an unpleasant flavor to milk and butter. We always found carrots and other roots of great value for sheep. We saved our roots either in pits, or frost-proof cellars under the barn; always washed clean and cut up pretty fine; and we found them the cheapest feed we could raise when properly managed.

It is hardly necessary here to go into details on the best mode of planting, gathering, and saving roots, as every farmer will consult his means, convenience, and circumstances in the case. All I desire is to enforce upon the mind the usefulness and value of raising and feeding roots liberally during the cold months to *all* the stock.

There is no product of the farm that can be made so profitable, generally, as *winter apples*—aye, more properly, spring apples—for it is an easy matter to keep them through the winter sound and juicy for spring and early summer, when they will command a high price, much more than adequate to pay for the trouble of securing them. All that is necessary is to gather and sort them without bruises, specks, or defects; lay them away in dry, cool places, but not cold

enough to freeze; it is better to put them in barrels or small boxes than to throw them in large heaps, as there is less pressure and better ventilation. With proper care, and very little more danger and expense, many sorts of choice apples can be as safely kept until May and June as till February, and they will sell for nearly double the price when kept a little longer.

They should be carefully gathered—excluding all anyway defective for early sale or use—and placed in barrels or boxes, without any bruises or being wet—and by no means be allowed to fall on the ground. They should be picked as late as possible before frost.

A very cheap and convenient basket for picking apples can be made of corn-husks, by wreathing them into a rope as big as a small ear of corn, and then winding them into a small basket, about the size of your hat; then driving in little sticks, like pipe-stems, an inch apart around the rim; after which make the little basket fast on one side to a slim handle, long enough to reach the high fruit; then gently crowd the edge or rim under the apple, so that the stem will come between the small sticks, which readily takes off the apple without bruising.

This is one good and safe way to gather fine apples for long keeping; and there are many others, among all of which different growers will choose to suit their own tastes and convenience; but, in my opinion, none is better than these corn-husk baskets, which can be made at home, by most any one, and good fresh material is at hand just at the right time—and never bruise the fruit.

But my particular object, in this article, is to stimulate more attention and care to long keeping apples for spring and summer markets; as the enhanced price for such fruit is much more in proportion than the increased cost of saving and supplying them. Besides the pleasure of having well preserved, juicy apples at that time of the year, health is promoted thereby, in the free use of them, instead of so much “green stuff” as is often substituted therefor.

And here the general principle or fact may be enforced that, other things being equal, every community and locality is more healthy, happy, and prosperous where plenty of fruit is raised, and eaten in abundance throughout the year, while, where this is done, farmers are generally more thrifty, and particularly in a region so eminently favorable for fruit growing as Virginia is, both as regards soil and climate, there should be no lack, particularly of apples, grapes, and pears; and this State should not be outstripped in this respect by Ohio and Pennsylvania, when the subject is well understood.

POMONA.

THE ORCHARD.

Hale's Early Peach.

Mr. Editor,—As I promised I send you a few notes in favor of Hale's Early Peach, so much abused, and noticed in your September number.

I have 600 Hale's Early, and last year was the first time that they produced. The crop was a failure, and it put me to study out what was the cause. I noticed that the tree was remarkably vigorous, and at the same time hardy. It passed through a frost that destroyed all the blooms of every other peach whilst Hale's Early stood untouched and in perfect flower, letting its fruit to perfection at least two weeks earlier than any peach I know of. I am satisfied that its vigorous growth was the cause of the fruit rotting about the time it should have matured, it having made a growth of from 4 to 6 feet that season. My conclusions were, that upon the same principle that the vine with too much vigor of growth sloughed its fruit, so must Hale's Early, or the same thing. I, therefore, this season, let the grass and weeds take possession of the orchard to check the rapid growth of my trees, and the result was a success, as I think I am the only one who realized a profit from Hale's Early in our county. My trees paid me well—the crops selling for \$600, which I consider a good yield for so young an orchard; and if I had not made a mistake in handling them, they would have realized more. I am now fallowing my orchard for oats to be seeded this month, and over them I shall seed grass, and by allowing my orchard to remain in grass, expect to make Hale's Early a success.

F. W. LEMOSY.

We are glad to learn that Mr. Lemosy has found a way to secure a crop of Hale's Early, and hope he may continue to succeed both with his peaches and his magnificent vineyard at Laurel Hill.

We see from an article in a late number of the *Norfolk Virginian* that the Hartford, Ives, Delaware, Martha, Concord, Catawba, Scuppernong and Mish all succeed well with him as market grapes, while he looks to the Norton as his main dependence for wine.—ED.

Storing Winter Apples.

A correspondent of *Laws of Life*, who claims to have had extended experience, is "decidedly of the opinion" that apples keep far better when put into close boxes or barrels, and secluded as much as possible from the air. When thus stored, he says they will come

out in the spring full and plump as when taken from the tree. Many varieties, as the Talman Sweet, Spitzenburg, and those kinds that are not considered as long keepers and shrivel badly, will do well treated in this way. I have, he continues, found universally, that they keep better to let them lie without picking over. It is much better to pile them into a large bin across the cellar, say six or seven feet high and four or five feet wide, and cover them up tightly, than to lay them on shelves. I once saw such a bin that a man had kept through the winter. About the first of April he thought he would open the windows on the side of the cellar next the bin to let in the air that they might keep better. I was at his place and he called my attention to the fact. Two windows just over the bin were opened about ten days or two weeks, and the apples exactly opposite the windows about one-third rotted for as much as a foot in depth, and the remaining part on either side were not rotted at all. Another instance: A neighbor of mine had about 500 bushels in a pile in a cellar. As they became a little specked he commenced picking over; when about half done, got tired and concluded to let them go. When marketed about six weeks after, found that about one-third of those picked over were not fit for market, while all but about one-twentieths of the others were good. This I have seen in numerous instances. If you wish to try the experiment, make a box as tight as a carpenter can make it, and when picking from the orchard fill it and nail it fast. Let it lie in the orchard till it is in danger of freezing; then put it in the cellar. Put the same quantity on shelves for trial. I am pretty sure one experiment will convince.—*Pomologist*.

KEEPING APPLES IN SAW-DUST.—Saw-dust is said to be an excellent material for packing apples in for preservation, and we are inclined to believe it true. Last fall we packed a few Ben Davis and Wagner apples in dry saw-dust—made as dry as it could be by thorough exposure to the sun and air. Just saw-dust enough was used to fill up the interstices between the fruit. The box was placed in a dry, well ventilated cellar, and elevated about three feet from the ground. At present (Feb. 25) the apples show a remarkable degree of preservation and improvement. They have colored up more highly than any specimens of the same varieties that we have ever seen. They are as firm, fair, sound and plump as at the time of packing, while the Wagner, stored in the usual way, is past its season, in fact gone.—*Western Pomologist*.

HOW TO PROVIDE AN ORCHARD.—We recommend all those who have not the comfort and profit of a good orchard of choice fruit to go to work at once to provide themselves, even though it be on a very small scale.

Prepare the ground you intend to devote to this purpose by deep and close plowing and subsoiling. Make it rich by a liberal application of dissolved bones, and then plant out a selection of the best varieties of peaches, apples, pears, plums and cherries, with a few quinces. Buy Southern-raised trees from a nurseryman of character and reputation. Avoid tree peddlars.—*So. Farm and Home.*

THE VINEYARD.

A New Device in Grape Culture.

Three years since. Mr. E. F. Underhill, late Clerk of the Assembly, and for many years a well known stenographer and journalist in this city, removed to Brocton, Chautauqua County, and commenced the cultivation of grapes. In learning the practical details of vineyard cultivation and management, the idea of a simple device suggested itself to him as a substitute for the tediously applied, and often costly and insecure, substances which had always been used to tie vines to stakes or trellises. This, after two years' of experiment, he perfected in a little implement which he calls the vine-lock. It is made of wire, and has forms adapted to securing the shoots or canes, whether their growth is perpendicular, oblique, or horizontal. It has the merit of simplicity and cheapness, and, being made of metal, can be used for years, while each season the grape-grower has always been compelled to get a new stock of material for ties. When once attached to the stake or trellis, it remains there for use until by decay it breaks and falls off. While it holds the vine with perfect security, there is sufficient space within the lock to admit of the shoot or cane attaining its full growth. When it is considered that on every acre of grape-vines, from five to ten thousand ties are necessary each season, making hundreds of millions in the aggregate vineyards of the country, the value of a little contrivance like the vine-lock, which will save half the labor of tying, can be easily seen.—*N. Y. Tribune.*

THE DELAWARE GRAPE.—This, to our fancy, almost the best hardy grape in the market, always attractive, with its compact bunches, clear color and fine flavor, has one drawback: it is in many locations a poor grower.

A medical friend of ours in Philadelphia, advises us of his great success in remedying this, by inarching it on Rogers' 15, a vigorous grower. The Delaware, on this stock, made a growth of nine feet the first season. The Clinton, or any other free growing variety, on the Delaware may be worked, may remove the only objection ever made to this very popular grape.—*Ex.*

AIR TREATMENT OF WINES.—The theory of the air treatment of wine is based upon the assertion "that currents of *rapidly* moving air through fluids or solids prevents mold and decay of any kind, quickens and promotes, however, healthy alcoholic fermentation and the germination of all vegetation except destructive moulds and fungi."

VEGETABLE GARDEN.

Celery in Winter.

In regard to the management of celery in winter, the *Germanatown Telegraph* remarks: "We pursue two modes, and find both to answer well. The first is to remove the celery to high and dry ground, dig a straight trench spade deep, stand up a row of plants singly, then three inches of soil, then another row, and so on until about half a dozen rows are finished, when commence another bed, and so on. The soil should be packed in firmly and banked up, so that the tops of the celery are just covered, then spank off roof-fashion to turn the rain. Over this two wide boards, nailed together, should be placed, as a security against moisture, or straw can be bent over and secured at the bottom with bean poles. Celery put away thus carefully, ought to keep till May. *For remember it is water, not frost, as some say, that rots celery.* Frost adds to its tenderness.

"Another plan is to sink barrels into the earth, so that the tops are two or three inches below the surface, then stand them compactly full of celery, without any soil, put tight covers upon them, so as to exclude all moisture, and then a couple of inches of soil. By this mode, somewhat more troublesome than the other, and which we adopt for only a portion of the crop, it kept well for the last four or five years until all was consumed, which was late in the spring.

"If preserved in the rows, it should be well banked up, the water protected against, and a covering of straw or corn fodder laid cross-wise."

Cost and Profit of Gardening.

Mr. J. J. H. Gregory delivered three lectures, recently, at Cornell University, on "Market Gardening and Market Farming," in which he gave some common sense ideas about the cost and profit of gardening. The expense of raising an acre of cabbage, including manure, time, labor, &c., \$150; market value of the crop, \$300; gain, \$150. An acre of onions cost \$260; price \$500; gain, \$240. Squashes cost per acre, \$140; price \$180; gain, \$40. Market farming must be carried on within twenty miles of the city. Ten acres is enough for a farm, five for a gardener. More is gained by cultivating one acre well, than two acres half as well. He must carry his own produce to market in his own wagon. The ground must be fairly stuffed with manure. Two crops must be cropped off of the same ground year after year. Hot beds are absolutely necessary, and incessant care is unavoidable. It is a business that requires capital, energy, and hard work, both early and late. Small gardeners will often make their land pay \$500 to \$1,000 per acre annual income; but the average farmer can hardly hope to get more than \$100 to \$150.—*Am. Rural Home.*

SOIL FOR AUTUMN AND WINTER CABBAGES.—The importance of a hard seed bed for onions is generally recognized in gardens, but beyond this a good many cultivators go little or no further. I have long observed that broccoli, cauliflowers, cabbages, grow better if the ground has been trodden or rolled firm previous to planting. Firm planting is also helpful to a good start. Especially has this been seen to be the case with autumn cabbages planted towards the end of September to stand the winter.—*Field.*

A CURIOUS WAY TO RAISE CABBAGE.—Take a large head of cabbage, strip off the outer leaf, and slip off the bud found at the root of the leaf. Take this bud and simply set it in rich dirt, like any other plant. The result will be a fine growth of early cabbage plants with heads larger and sounder than can be raised in the ordinary way. I don't know whether this plan is new to you or not, but to me it was when I first saw it. This plan of raising cabbage is much practiced in Iowa. Let some of your readers try it.—*Pacific Rural Press.*

TO PRESERVE POTATOES.—This method as recommended by the Board of Agriculture, is to dig, in a very dry spot, trenches six feet wide and eighteen inches deep; spread straw to pile the potatoes

into the shape of the roof of the house, and to cover tight and close with straw, six inches thick, and then with earth fifteen or eighteen inches more, flatted regularly and firmly, and sharp at the top, raised from three to five feet above ground. If there should be any apprehension of moisture, dig a trench at a few yards off, deeper than that in which the potatoes are laid. The drier they are, when thus packed up, the safer they will be.—*Industrial Gazette.*

FLOWER GARDEN.

Keeping Plants in the Cellar.

It may interest some of your lady readers to know how those who cannot afford the luxury of a green-house can keep their tender plants all winter. My cellar is dry, cool, and dark. About the 1st of November I have the orange, lemon, petersporum, and oleanders carried into the cellar. These are all in large tubs, except the latter, which I have placed in one when taken in, and then the roots covered up with soil. These plants are watered once a week while they are in the cellar with tepid water, and they keep in fine order. In the Spring the foliage looks fresh and green. The scarlet geraniums we have taken up with a spade, the earth shaken from the roots, and the geraniums tied in bundles of five or six together, and then fastened to the beams of the cellar without further protection. In April they look wilted, but when transplanted into the open air, they soon recover and grow luxuriantly. I have been very successful in growing the scarlet salvia from seed sown in pots in February, and then placed in a room facing east, where the temperature is even, but low. They are transplanted in beds in the garden in May, and with me they always grow and blossom luxuriantly until frost. The climbing cœbea I have taken up in the fall, and transplanted into an eight-inch pot, and then placed in this room. I water it freely when first taken up. Last winter this vine grew finely, covering one side of the room with its beautiful and delicate foliage.—*Cor. N. Y. Tribune.*

Growing Pond Lilies.

On seeing my dish of pond lilies and admiring their beauty and fragrance, I asked, why is the pond lily so little cultivated? a flower so much admired and so easily grown, yet in many places so rare. The answer was: it is not universally known that it can be grown so easily. Many ask the question, where did you get those pond lilies?

We tell them we *raise* them. "What! raise pond lilies?" We reply, yes—raise them as easily as corn or potatoes. And as many seem interested about them, I thought I would tell the lovers of flowers how we raise ours.

A few years ago, my husband seeing some growing in a distant pond so nicely and spontaneously, thought he would try them in his—a small pond of a few rods extent at one end of his field. He brought home a root and set it in. This was done by wading in barefoot, and taking it between the toes and pressing down in the mud. It soon made its appearance above the water, and now the pond is pretty well covered with leaves and lilies, and it does not have that sickening appearance that standing water usually has, but is made the home of one of the most beautiful kinds of flowers instead. We know of no insect that troubles them; neither frost nor wind affects them; nothing molests them but mischievous boys, who love the flowers, but will take no pains to raise them themselves. Now I would advise all who love this sweet lily to get a root and set it in some pond that they can have access to, and they will soon reap a rich reward for a little trouble.—*Maine Farmer*.

FRESH BLOWN FLOWERS IN WINTER.—Choose some of the most powerful buds of the flowers you would preserve, such as are latest in blowing, and ready to open; cut them off with a pair of scissors, leaving to each, if possible, a piece of the stem three inches long; cover the end of the stem immediately with sealing-wax, and, when the buds are a little shrunk and wrinkled, wrap each of them up separately in a piece of paper, perfectly clean and dry, and lock them up in a dry box or drawer, and they will keep without corrupting. In winter, or any other time, when you would have the flowers blow, take the buds at night and cut off the end of the stem sealed with wax, and put the buds into water, wherein a little nitre or salt has been diffused; and the next day you will have the pleasure of seeing the buds open and expand themselves, and the flowers display their most lovely colors and breathe their agreeable odors.—*Manf. and Builder*.

THE ROSE ON THE LAWN.—Few persons, says an English journal, are aware of the magnitude to which the rose may be grown, or the splendid effect it can be made to produce on a lawn or pleasure ground; yet with a sufficiently strong stem, and a system of careful and patient training, there can be no reasonable doubt that the standard roses could be grown to the size and form of the ordinary examples of the Weeping Ash.—*Ex*.

Poultry Department.

Diseases of Poultry.

THE CHOLERA has been unusually fatal in certain poultry-yards near Richmond, one gentleman having lost more than one hundred fine fowls; another sixty or seventy; and yet another fifty or sixty. In each instance every effort to discover a local cause has failed; and what is more unfortunate, the usual remedies recommended in the standard poultry works have all failed in staying its progress. On inquiry, we learn that the epidemic has been more fatal to Asiatic breeds than to others. This I attribute to the desire of breeders to raise a large number, and, as a consequence, many of the yards are too much crowded for healthy exercise and sufficient range. Poultry must have sound food, fresh water, and good range, to ensure health.

A NEW DISEASE, and a very fatal one, is now prevailing in some of the poultry-yards of this section. Most persons call it cholera, for want of a better name; but the cases we have seen have no resemblance to ordinary cholera. In one yard we saw three Cochins that seemed to be in good health in the morning, but within two hours thereafter they were dead. A partial examination of one of the bodies disclosed an enlargement of the heart and liver, but further than that the fowl appeared to be free from disease. Many similar cases have been reported to us, and efforts are being made to ascertain the cause and a preventive.

HARD CROP is generally produced by feeding young fowls on corn meal dough exclusively. The quickest remedy is, to open the crop, empty and wash it out, and then sew it up. The usual remedy is, to pour tepid water down the throat of the chick, and then gently work the ball until it is softened sufficiently to pass off.—ED.

Sitting Hens.

All hens are not good sitters or mothers, and, as a consequence, all fertilized eggs, even though given when fresh to a broody hen, do not produce chickens. The best sitters are those that turn their eggs often—that leave their nests regularly to feed and bathe, and that return promptly without waiting to be reminded of their duty. Some hens, instead of sitting upon their eggs, merely stoop over them, and consequently do not impart the necessary heat for successful incubation. Others leave their nests at irregular periods,

never turn their eggs, and exhibit no interest in the work they have undertaken. All such are worthless as mothers, and if they succeed in hatching a few chicks, are too indolent to provide for them. They sometimes lay well, but, as a general thing, are best suited to the fattening coop and the table.—ED.

Change of Feed.

Poultry thrives best where careful attention is given to their feed and water. If fed on wheat only they get tired of it, and soon lose appetite, flesh, and sometimes health. The best plan is to feed corn meal mush in the morning, soaked wheat, oats or barley at noon, and corn at night. Boiled potatoes and wheat bran make a good soft repast for morning change. Raw onions, sliced thin, make an excellent appetizer, as all fowls relish them. Cabbage leaves, turnip tops, or lucerne, are all healthy green food, of which poultry are very fond. A spoonful of sulphur, in soft food, once a week, and red pepper once a week, will prove advantageous to the feathered family.—ED.

Most Valuable Breeds of Poultry.

One of our experienced poultry breeders, after trying most of the new breeds, classifies them thus as regards value for the million: In situations where eggs for use or market are *more* the object than anything else, he recommends the French Houdon, the Dominique and White Leghorn breeds. For a fowl for *general* purposes, and combining large size, good laying properties, quiet habits, easy fattening and tender flesh, he prefers Partridge Cochins, Dark Brahmas, Light Brahmas, Buff Cochins. These are all hardy, and every way desirable.—*Practical Farmer*.

CROSSES.—A cross between the Brahma and common barn-yard fowl, makes a large fine bird for the table. A few Brahma cockerels added to each barn yard will prove invaluable to those who wish early spring chickens.—ED.

Web-Footed Poultry.

DUCKS.—Our experience is, that ducks lay fewer eggs than Brahma or Houdon pullets; that the young are as liable to disease and harder to raise than chickens; and that they are too dirty for a small yard or garden. Where water is convenient and ranges ample, they may pay. As we have no fancy for *quacks* of any sort, we do not cultivate them.—ED.

GEESE.—Not more than three geese to one gander ought to be kept for breeding, and they require a wide range, affording plenty of grass and still water. A goose-house for four should not be less than 8 feet long by 6 feet wide, and high enough for a man to stand in upright. A smooth floor and good ventilation is necessary. Over the floor a little clean straw should be spread every second day, after removing that previously used. A compartment about $2\frac{1}{2}$ feet square should be assigned to each goose for laying and sitting, and when one is hatching the gander and other geese must be shut out from her. Wherever a Toulouse goose lays her first egg, she is very pertinacious in there depositing the remainder. The Toulouse goose is a very good layer, but rarely requires to sit; and if she does, is a very bad mother. Where laying geese are kept together, and they are liable to interrupt each other, remove the eggs daily, and mark on each the day it was laid. They will continue good for three weeks, but the freshest eggs should be sat upon. If geese keep well to their separate nests, let the eggs remain.—*Canadian Poultry Chronicle*.

How to Get Plenty of Fresh Eggs.

In a long communication to the *Germantown Telegraph* upon the subject of poultry, Mr. E. Dwight, of Hudson, Michigan, considers the question, "How to get plenty of good flavored fresh eggs with little trouble," and thinks if there is any secret in it he has discovered it, and makes the same public for the benefit of all interested. He says:

"Once, thirty years ago, I was troubled just as my neighbor now is. I fed my hens plenty of corn, and got but few eggs. I reasoned upon the matter, and happened to think that the constituent parts of milk and the white of eggs were much alike. Now, it has long been known to milkmen that wheat middlings and bran are about the best of any feed to make a cow give milk; why not, then, the best to make the hens lay eggs? I tried it, and since then have had no trouble. My mode of preparing the feed is to mix about five parts of bran with one of middlings. In the morning I wet up with water about four quarts of the mixture in a large tin pan, taking pains to have it rather dry, though all damp. This I set in a warm, sunny spot, south of their shed, and they walk up, take a few dips, don't seem to fancy it like corn, and start off on a short hunt for something better, but always coming round in a short time for a few more from the dish of bran. There is little time during the whole day but what one or more are standing by the pan and helping them-

selves. I am careful to mix for them just as much as they will consume during the day. At night, just before they repair to the roost, I usually throw them about a pint of shelled corn, well scattered, so that each one can get a few kernels. If your hens don't incline to eat this feed at first, sprinkle a little Indian meal on to it. I would like all who complain of not getting eggs to try my plan, and they will never be sorry."

Interesting Facts About Eggs.

NUMBER OF EGGS A HEN WILL LAY.—It has been ascertained that the ovarium of a fowl has been composed of 600 ovules or eggs. Therefore a hen during the whole of her life cannot possibly lay more eggs than 600, which in the natural course are distributed over nine years in the following proportion:

First	year	after	birth,	16 to 20
Second	"	"	"	100 to 120
Third	"	"	"	120 to 135
Fourth	"	"	"	100 to 115
Fifth	"	"	"	60 to 80
Sixth	"	"	"	50 to 60
Seventh	"	"	"	35 to 40
Eighth	"	"	"	15 to 20
Ninth	"	"	"	1 to 10

It follows that it would not be profitable to keep hens after their fourth year, as their produce would not pay for their keep, except when they are of a valuable and scarce breed.—*G. K. Geyelin on Poultry Breeding.*

FLAVOR AND COLOR OF EGGS.—There is a vast difference in the flavor of eggs. Hens fed on clean, sound grain and kept on a clean grass run, give much finer flavored eggs than hens do that have access to stables and manure heaps and eat all kinds of filthy food. Hens feeding on fish and onions flavor their eggs accordingly. The richer the food the higher the color of the eggs. Wheat and corn give the best color, while feeding on buckwheat makes the eggs colorless, rendering them unfit for some confectionery purposes.—*Farmer and Gardener.*

THE SEX OF EGGS.—Eggs containing the germ of males have wrinkles on the small ends; on the contrary, eggs which are smooth at the extremities, and nearest to roundness, produce females, while those pointed at end usually engender males.

Bee Department.

Experience of an Apiarist.

Mr. Editor—When I last communicated with the *Planter and Farmer* I feared I should have to feed my bees extensively to prepare them for winter, as the summer yield of honey had been almost nothing. To ascertain whether I was gaining or losing, I placed a hive on a small platform scales. The bees seemed very busy, but that was no sign that they were gaining honey. I found that I lost more honey than was gathered from August 31st to September 22d. As it may interest some of your readers to see the daily work or daily loss or gain of one hive of bees in the latter part of the season, I append a copy of my "Bee Diary."

Hive No. 38 weighed 51 pounds gross, August 31st.

"	49	"	"	September 5th.
"	49	"	"	September 17th.
"	51	"	"	September 19th.
"	48 $\frac{3}{4}$	"	"	Sept. 22d, bad weather.
"	51	"	"	Sept. 23d, 2 $\frac{1}{2}$ lbs. gain.
"	53 $\frac{1}{4}$	"	"	Sept. 24th, 2 $\frac{3}{4}$ lbs. gain.
"	55 $\frac{1}{2}$	"	"	Sept. 25th, 1 $\frac{1}{4}$ "
"	56	"	"	Sept. 26th, $\frac{1}{2}$ "
"	58	"	"	Oct. 1st, 2 "
"	62	"	"	Oct. 2d, 4 "
"	80	"	"	Oct. 9th, 18 "
"	85	"	"	Oct. 10th, 5 "

This yield of honey was gathered principally from a weed called by some "stick weed" or "iron weed," also from the smart weed, that grows on low ground or damp places. I also saw some of my Italians visiting the red clover blossoms, and they seemed quite busy on them, although there are comparatively few heads of red clover so late in season. I also found young bees hatching out very rapidly. In some of the hives the bees were hanging out almost like they were swarming. In fact, a neighbor had a swarm to come off last week, which is the latest swarm I ever knew of.

I now feel no uneasiness in regard to my bees having enough of stores to carry them through the winter, for some hives gathered much more than No. 38.

I find a diary of facts valuable to refer to, not only in regard to bees, but in all farming operations. I have kept a farm diary almost continually since 1849.

W. R. POLK.

Westham, October 10, 1871.

Wintering Bees.

It is settled beyond a doubt in my own mind, by the experience of others as related in the *Bee Journal*, and by my own experience for several years in the apiary, that bees to winter well, must have sufficient ventilation to carry off the excessive moisture which accumulates in well stocked hives. This moisture arises partly from the exhalations from the bodies of the bees, but mostly, I think, from the surrounding atmosphere, which constantly holds in suspense a greater or less amount of moisture, according as its temperature is higher or lower. The warm atmosphere of the hives is capable of holding a considerable quantity, until it is condensed by coming in contact with the cold walls of the hive, at some distance from the cluster of bees. There it condenses, first into minute drops of moisture, and afterwards, if the cold increases, into frost. The constant accumulation of the quantity, by repeated thawing and freezing in a hive that has no efficient means of ventilation, gradually encroaches on the space occupied by the bees, finally reaching those on the outside of the cluster. These grow benumbed, cease to eat, lose their vitality, grow cold, the frost forms on their bodies, and they die where they stand. The frost continues to penetrate the cluster, if the cold weather is prolonged, until finally the last bee dies covered with frost. The warm days of spring then melt this frost, and on examination, the whole mass of bees are found dead and wet as if just dipped from a basin of water. I found one hive in that condition last spring. The entrance to this hive was left open, but the honey-board was left on tight, without any upward ventilation, as an experiment. All my other colonies wintered well on their summer stands, having their entrances open three or four inches wide, and the front and rear openings in the honey-boards (half an inch wide, and extending the whole length of the hive) uncovered, but the middle opening closed.

For the coming winter I have adopted Mr. Langstroth's plan with some modifications. I shall omit the outside covering of the hive, believing that it is better to have the hive of a single thickness of board, say seven-eighths of an inch, in order that the heat of the sun may easily penetrate it, and warm up the hive almost daily, thus giving the bees an opportunity to bring to the central part of the

hive fresh supplies of food from the outer combs. This plan *may* lead to a somewhat greater consumption of honey; but if a swarm of bees will give its owner from fifty to one hundred pounds of surplus honey in a season, as mine have done the past summer, he ought to be entirely willing to have them eat all they need during the winter. At all events, one of two things must be done, to winter bees successfully, in addition to their having a supply of food and thorough ventilation—they must either be kept in a repository where frost cannot enter, as a cellar, trench, ice-house, or the like; or they must be put where the sun can warm them up occasionally.

I have removed all the honey-boards, placed two one-half or three-quarter inch strips across the frames, and covered the whole top of the frames with any old woollen garments that could be found about the house. These need no cutting or fitting. Pack them in as you would pack a trunk, (the roof or cover of my top box is movable, and I like it much better than the old plan of having it nailed on,) two, three, or half a dozen thicknesses will make no difference. The moisture will pass through as readily as the insensible perspiration of our bodies will pass through our bed covering. The hives will remain dry and the bees warm. I have no fear of losing a single swarm the coming winter, although several new ones which I bought are quite weak, owing to the sudden closing of the honey harvest a month earlier than last year, in consequence of the drought.—*R. Bickford in Am. Bee Journal.*

Transporting Honey to Market.

One great difficulty in the way of supplying the large markets with good honey in boxes, has been in getting it there in good condition. The comb being new and filled with heavy honey, if not very carefully handled, is broken down, and is soon churned up into a mushy mass. This is particularly the case in warm weather, and but little better success has been met with in holding it back till winter. Express and other transportation companies seem to have a particular spite at brittle things, and take extra pains to tumble them about. Most of the large honey raisers find it necessary to accompany their honey to market and see to handling it themselves. The section honey box has so far proved successful as a shipping package. It is only necessary to take the sections apart, and under each sheet of comb insert a block of wood half an inch square and five inches long coated with hot beeswax, as a support, and as the comb is generally fastened at the top and sides, this holds it firm. I have shipped boxes thus prepared over a thousand miles by river and railroad, that arrived in good order.—*D. L. Adair, in Southern Farmer.*

Dairy Department.

Better Care rather than More Cows.

The anxiety to secure the greatest amount of butter and cheese, has led many of our farmers who are engaged in the dairy business to increase the number of their cows beyond what they can properly care for, or their land, as usually managed, can sustain to good advantage. To increase their dairy products, they must increase the amount of milk, and in the opinion of many, the easiest, if not the only sure way to do this, is to add to the number of cows kept, and following out this practice they have been increased beyond the limits of profitable production.

While all will admit that the profits of the dairy may be increased by care in the selection and breeding of cows, very few seem to realize that the cows they now have can be made for more profitable by extra feed and care. This is unquestionably the fact, as the experience of many in the business goes to show. It is, in fact, the experience of every one, for all must be aware that the yield of the same animal varies in quantity and quality, in different and also in the same season, with the quantity and quality of food. The great yields of butter and milk from single cows, and recorded as wonderful, are in a great measure to be attributed to extra care and feed; and had the same cows received only common attention, very seldom would their yield rise above the common average. The celebrated Oaks cow, in the first year, with ordinary keep, produced only 180 pounds of butter. The next year, in addition to her former allowance, she had 12 bushels of corn meal, and yielded 300 pounds of butter. The third year the amount of corn meal was increased to 35 bushels, and over 400 pounds of butter was produced. The fourth year, one bushel of meal was given each week, and in addition, all the skim milk, and in 172 days the amount of butter made was 480 pounds. So with other cows, it holds good, that the more of the right kind of food consumed, the greater will be the returns. Cows differ in the amount of milk they will produce from a given amount of food, but the yield of even the poorest may be increased, by giving them extra care and attention.

Much of the food given goes to support life in the animal, to furnish material for growth, for animal heat and respiration, and it is only that which is consumed beyond what is wanted for the health

and vigor of the cow which yields a direct profit to the owner. Now the quality of the cows remaining the same, the smaller the number required to consume a given amount of food the greater will be the profit, for a smaller amount will be expended in sustaining animal life, a less amount of capital will be required, the risk of loss from disease and death will be lessened, and a smaller amount of care and labor will be required. We do not hesitate to say that there are but few dairies in the country which would not be more profitable, were the number of cows diminished: and further, that were the same amount of food and care now given to the cows of the country, bestowed upon two-thirds of the number, not only would the amount of dairy products not be diminished, but, were the cows properly selected, the aggregate would be largely increased. If the quality of the cows can be improved by a change, it should be done; but it is poor policy for a farmer to increase the number of his cows, until he has forced those he has to the utmost limit of production, and has an extra supply of food left.—*Bonham's Mess.*

Management of Dairy Cows.

A certain German farmer was visited, one day, by some cheese-makers from over the border, who desired to buy of him all the milk of his cows for the purpose of making cheese. Not being able to agree upon the terms, he finally proposed to let them take the entire charge of his cows, and agreed to furnish feed amply sufficient, the dairymen assuming the whole care of feeding it out, and paying a fixed price by measure for all the milk. "I found myself at once," says he, "under the necessity of selling almost half my cows, because the dairymen required nearly double the quantity of fodder which the cows had previously had, and I was well satisfied that all the produce I could raise on my farm would be far from sufficient to feed in that way the number of cows I had kept. I was in despair at finding them using such a quantity of the best quality of feed, though it was according to the strict letter of the contract, especially as I knew that I had given my cows rather more than the quantity of food recommended by men in whom I had perfect confidence. Thus, while Thaer names twenty-three pounds of hay, or its equivalent, as food sufficient for a good sized cow, I gave mine full twenty-seven pounds. But, if the change effected in the management of my cows was great, the result was still more striking. The quantity of milk kept increasing, and it reached the highest point when the cows attained the condition of the fat kine of Pharoah's dream. The quan-

tity of milk became double, triple, and even quadruple, what it had been before; so that, if I should compare the product with that previously obtained, a hundred pounds of hay produced three times more milk than it had produced with my old mode of feeding. Such results, of course, attracted my attention to this branch of farming. It became a matter of pleasure; and my observations were followed up with great care, and during several years I devoted a large part of my time to it. I even went so far as to procure scales for weighing the food and the animals, in order to establish exact data on the most positive basis."—*American Stock Journal*.

BE CAREFUL.—Man's inhumanity to cows is often illustrated by abuse of the animal for restlessness caused by the pain inflicted in milking, by sharp finger nails. Mr. J. Furnam, Segel, Iowa, writes to the New York Farmers' Club, that one of his cows had always been very sensitive; but that after he commenced milking by clasp- ing his fingers clean around her teats, so that his nails could not hurt her, she became gentle. Some cows will bear the pressure of the finger nails, and not resent it; while others will flare up on the first grasp, and knock the pail across the yard; then come pounding and kicking. Let us be careful with our cows, and not act without thinking.—*Prairie Farmer*.

THE BEST GRASS FOR BUTTER.—If you aim at a great flow of milk, feed clover; if you wish rich milk and well-flavored butter, feed young timothy and white clover; if you aim at the best results, both in quantity and quality of butter, feed on fresh pastures of white clover and timothy in summer, and early-cut timothy and wheat bran in winter. The grass must be cut when heading out; or better, young aftermath well cured.—*Valley Farmer*.

ABOUT MILKING.—Five per cent., and perhaps ten, can be added to the amount of milk obtained from the cows of this country, if the following rules are inexorably followed: 1st. Never hurry cows, in driving to and from the pasture. 2d. Milk nearly at equal intervals. Half-past five in the morning and six at night are good hours. 3d. Be especially tender of the cow at milking time. 4th. When seated, draw the milk as rapidly as possible, being always certain to get it all. 5th. Never talk or think of anything else besides what you are doing while milking. 6th. Offer some caress and always a soothing word when you approach a cow and when you leave her. The better she loves you, the more free and complete will be her *abandon* as you sit by her side.

Mechanic Arts.

Building Paper—Felt.

In our last issue we noticed the recent introduction of a new building material made of straw. It is a stiff pasteboard of two kinds—one plain, the other saturated with coal-tar. A similar material, weighing 12 to 16 ounces to the square yard, is also manufactured from the reed-cane of the Southern cane-brakes, disintegrated by the explosive force of steam, the cane being blown from large cylinders similar to cannon. Building-paper is also made from woolen rags, beaten up into pulp, and run off upon a paper-machine into rolls, and then saturated with tar.

In building frame-houses in the neighborhood of New York, it has become the general practice to interpose paper-felt, plain or tarred, between the rough boarding on the studs and the outer covering or clap-boards. This is done to keep the house cool in summer and warm in winter.

The paper-felt is also put under tin and slate roofs, to keep out heat and cold. It is also used for deafening floors and inner partition walls, and to secure warmth. For inside work, the plain unbitumenized paper-felt is used.

Paper-felt has also been used in the West as a substitute for plaster. When used in this way, laths of even thickness are put on from half to three-quarters of an inch apart, and the felt tacked, or glued and tacked on, putting the edges together without lapping. The felt is in rolls, and the strips are tacked up and down the centre before tacking the edges. A strip of strong paper or cloth is pasted over the joints, covering the tack-heads, and then it is whitewashed or papered. Or the studs are sheathed inside with dressed lumber, and then covered with the felt-board tacked on, and then papered. The Virginia Cane-Fibre Company make a felt specially for this purpose, saturated with resin-size, so as to prevent the absorption of moisture or dampness, and avoid swelling, warping, or shrinking. This felt is tacked on sheathing-boards or laths, as above described, or is tacked on the studs without any backing except for a few feet above the floor, and is sometimes fastened down with ornamental strips or beading of wood, tacked on so as to form square or other shaped panels, keeping the felt firmly in its place on the walls and ceiling.

It is claimed that thick paper-felt, as a substitute for plaster, has

the following advantages: It can be put up in winter-time as well as in summer; it is warmer than plaster, and will not crack; can be easily repaired if damaged; the time lost in waiting for the plaster to dry is saved; and the cost is less than half that of plaster. There is but little ordinary labor required in putting it up.

The expense of lining a frame-house with paper-felt is very small—only about ten dollars for a frame-house 22 feet wide, 30 feet deep, and 20 feet high, covering all the four sides with the cane board. Even in building a laborer's cottage, this additional expense could be afforded, to keep it dry and warm.

It is asserted that frame-houses in the North-West, lined with this material, have kept out the frost with the thermometer below zero, and that the entire cost of the lining has been saved in fuel in a year or two.

In reference to brick houses and buildings already erected, we have received the following suggestions:

In brick houses, when the object is merely to secure warmth, (the ordinary lath and plaster being used,) the paper-felt can be put on the studs before the laths are nailed on. It can also be put under the floors and roof, and in the partitions, and the incidental advantage of deafening will be secured at the same time.

In houses already built, the paper-felt can be put under the carpets, to serve the double purpose of keeping the floors warm and protecting the carpet from wear. If the cellars are lined, nothing will then freeze in them, and the rooms over the cellars will be kept warm. The lining can also be easily put in stables and workshops. Where there is much suffering from the cold, it may even be desirable to use the paper-felt in the shape of a movable frame or screen of panels placed temporarily against the walls of the rooms.

There is no longer any reason why there should be so much discomfort in country houses in winter time. When a room is not lined with the paper-felt, it will take several hours to warm it; most of the caloric generated by the fire in the room is absorbed by the cold walls. But it is very different with a room well lined with paper-felt; that is warmed in a few minutes.

Paper is well known to be an excellent non-conductor; but the use of thick paper-felt for the purposes indicated above appears to be of recent origin.

Great improvements in this manufacture may be anticipated—such as, for example, making the paper-felt fire-proof as well as water-proof.—*Exchange*.

Farmers do your own Repairing.

It may be well for men in most of the trades or professions to each do his own work, or rather to confine his attention to one particular branch of business; but with the farmer it is different. He must be able to do many kinds of work which might be considered as belonging to some other branch of industry, if he would be successful. Isolated as they are, in many cases, from those of other occupations, it is often a great waste of time to be obliged to leave the farm to have some job of repairing done. Many a time, in the busy season, it costs the farmer more for his time and travel than what he is obliged to pay for the work. Another item is the fact, that, if he make the necessary arrangements, he can make and repair many articles which he has been obliged to use, during the rough and stormy weather, when it is uncomfortable working out of doors.

I was in a shop, not long since, one very rainy day, when a farmer came in who had traveled three miles to have some trifling repairs made upon his harness. Now with fifteen cents worth of material, he might have done half a dozen similar jobs, and remained at home with a dry jacket. A ball of shoe thread and one of wax, with a pair of harness needles and an awl, will save any farmer who uses horses a vast amount of trouble and vexation. And it is the same with a "thousand and one" items, which I have not time to mention. Many persons not acquainted with farming seem to think that with a hoe, and a few other simple articles, a farmer is ready to go to work; but they will soon find, if they try it, that a farm of a hundred acres requires a more varied and extensive stock of tools than any other occupation in which the same amount of capital is invested. It is true that a farmer can make many of the articles required, if he possesses a reasonable amount of spunk and ingenuity. Therefore we say make and repair all that you can yourself, and thus be in a degree independent. Remember the old adage that "a stitch in time saves nine," and you have taken a long step towards prosperity.—*Maine Farmer.*

THE SPIKY ROLLER.—The spiky roller is much recommended by some English writers for mellowing clayey soils. It is also said to act beneficially in passing over old meadows that are grass bound, for the purpose of making the grass more thrifty. The spiky roller is merely a wooden roller with iron teeth or spikes driven into it. They are to be about seven inches long, driven three inches into wood, set four inches apart in diagonal rows around the roller; the outer ends are to be sharp and square.—*Am. Rural Home.*

Scientific Department.

Carbolic Acid.

So much has been said about carbolic acid, and it is now so largely used in medicine and the arts, that more information ought to be popularly disseminated in reference to it. It is not a new thing, but most of its applications are of a new date; and as nearly every person who has taken out a patent has given it a new name, we are often perplexed to recognize the precise article that is meant. It may be well to look into this labyrinth of names before proceeding to a description of the article itself.

Carbolic acid was discovered by Runge in wood tar in 1834, and was so called by him. It is a pity that other chemists have not adhered to the original name, as we should thus have been saved much confusion. Six years after Runge's original discovery, a French chemist named Laurent made some of the pure acid, and proposed to call it Phenylhydrate, from the Greek word meaning to illuminate, because it was supposed to be a constituent of illuminating gas; and still later, such names as phenylic acid, phenol, phenyl alcohol, coal tar creosote, coal oil acid, phenylous acid, and sundry others were proposed. All of them ought to be dropped, and the original name of carbolic acid retained. It is really and truly an acid, capable of combining with bases to form salts, but is not strong enough to drive out many other acids from their compounds.

Carbolic acid has been readily formed in the bile and urine of various animals, and is the product of the dry distillation of vegetable matter; and can be made by conducting the vapor of acetic acid or alcohol through a red hot tube. For technical purposes it is almost always made of coal tar, and as its boiling point is between 360 and 365 degrees Fahrenheit, it is from the dead oil that the greater portion is obtained.

The details of the manufacture of carbolic acid may be consulted in works on chemistry, but its properties and uses may well occupy our attention for a few paragraphs. When pure, it consists of long needles of a peculiar smoky odor and caustic burning taste; its specific gravity is 1.066, and it fuses at about 98 degrees Fahrenheit. It absorbs moisture from the air, and runs to water, and it requires twenty times its weight of water to dissolve it. Alcohol and ether dissolve it in all its proportions, and acetic acid is a better solvent than water. Concentrated solutions act powerfully on the skin, turn-

ing it white and afterward red brown, and the spots afterward peel off. Gelatine and albumen are precipitated by it, and this property has suggested its use in tanning. It is a dangerous poison; a few drops will kill a dog, and plants are at once destroyed by a weak aqueous solution.

Runge recommended carbolic acid for embalming bodies, and as a disinfectant, and tried many experiments to show its value for this purpose; but little attention was bestowed upon his assertions, and it is only recently that the substance has obtained proper recognition from medical and other authorities.

Extensive use is now made of carbolic acid to destroy the odor of stables; a carbolate of lime is prepared and sold for this purpose. As an insect exterminator, few agents can be compared with carbolic acid, and it is naturally applied by physicians for such cutaneous diseases as are caused by insect life. Several cases of death have been reported in consequence of an incautious use for this purpose. Three women who bathed themselves with a sponge with carbolic acid, to cure the itch, were immediately attacked with dizziness, and soon became unconscious. Two of them subsequently died, and the life of the other was saved with difficulty. When used as a wash for men and lower animals, it must be taken very weak, and in small quantities at a time. Dogs have been sadly tortured with it in the vain hope of killing fleas.

The odor of carbolic acid is sometimes disguised by mixing it with camphor, when it is required to keep moths out of furs and clothing. No doubt the preservative property of coal tar is largely due to the presence of this powerful agent.

All manner of soaps, ointments, and even troches, are made with carbolic acid, which must be used with caution, as the poisonous character of the acid suggests at once that it ought not to be tampered with. A new application of carbolic acid is proposed nearly every week, and it has become one of the most important of our chemical products.—*Scientific American*.

SPECIFIC GRAVITY TEST FOR POTATOES.—It is generally understood that the value of potatoes depend upon their specific gravity, and that the heavier the potato the greater the amount of nitrogenous matter it contains. This has suggested the idea of a convenient test by which the excellence of different varieties can be readily determined, and which consists in the use of saline solutions of different degrees of strength. If, assuming one variety as a standard, we make a solution of such strength that the potato will float at about

the middle of the mass, neither falling to the bottom nor rising to the surface, and apply the same test to other potatoes, we may conclude that if one fall to the bottom it is better, or if it rise to the top it is poorer than the standard. A series of standards has been suggested, therefore, by Dr. Neslee, of definite percentages of salt and water, thus producing a sliding scale applicable under any circumstances for the test in question.

SCIENTIFIC FARMING consists altogether and solely in deriving the greatest possible profit from the soil. Lessen the labor and increase the yield, is the sum of the whole. To do this, everything must be done at the right time, and in the best manner. By draining, the water must be got rid of; by cultivation, weeds must be destroyed; by manure, the soil must be enriched; by rotation of crops, the largest yield must be secured; by improved stock, the feed must be economized and made of more value; and the how-to-do-all this is the sum and substance of agricultural science. Books on farming relate the experience of successful men, the experiments they have made, and the results they have attained. Any and every farmer, who, by the use of his reasoning powers, is enabled to raise one bushel of corn per acre more than he has hitherto done, by improved methods, is a scientific farmer, however much he may disown the name; and not only has he done a good thing for himself, but the world at large is, to some extent, better for his efforts and success; his mission, as a man, has been to that extent fulfilled, and he will leave the world better than he found it.—*Hearth and Home*.

ARTIFICIAL RAIN.—At Stoke Park a tract of twenty acres is irrigated by artificial rain, the system being quite successful. The water was applied every night last summer in showers, excepting when natural rain made it unnecessary. The apparatus consists of pipes laid in the ground, supplied from an elevated reservoir, into which water was pumped by machinery. The financial exhibit made by the results of the experiments is said to be a good one. The interest on the money invested in the necessary machinery, and the cost of operating it, aggregating \$95 per acre for the entire tract of twenty acres. Likewise the income per acre aggregated \$200, being made up of the proceeds of one crop of grass and grazing in Autumn of 1870, and two crops of hay in 1871. The net profit was thus \$105 per acre. On land of the same tract and same character, used for the same purpose, but where the irrigation was omitted, the net profit per acre was but \$45.—*English paper*.

Household Department.

Spirits of Ammonia.

"A Housekeeper" in *Hearth and Home* urges her sisters in household labors to procure a supply of *spirits of ammonia*, and gives the following directions for using it :

"For washing paint, put a tablespoonful in a quart of moderately hot water, dip in a flannel cloth, and with this simply wipe off the wood-work ; no scrubbing will be necessary. For taking grease-spots from any fabric, use the ammonia nearly pure, then lay white blotting-paper over the spot and iron it lightly. In washing laces, put about twelve drops in a pint of warm suds. To clean silver, mix two teaspoonfuls of ammonia in a quart of hot soapsuds, put in your silverware and wash it, using an old nail-brush or tooth-brush for the purpose. For cleaning hair-brushes, etc., simply shake the brushes up and down in a mixture of one teaspoonful of ammonia to one pint of hot water ; when they are cleaned, rinse them in cold water and stand them in the wind or in a hot place to dry. For washing finger-marks from looking-glasses or windows, put a few drops of ammonia on a moist rag and make quick work of it. If you wish your house-plants to flourish, put a few drops of the spirits in every pint of water used in watering. A teaspoonful in a basin of cold water will add much to the refreshing effects of a bath ; nothing is better than ammonia-water for cleansing the hair. In every case, rinse off the ammonia with clear water. Ammonia is used as a rising in cake-making, etc.; but I cannot recommend it for that purpose ; and ten drops in a wine-glass of water is said to be an excellent remedy for headache and acidity of stomach, but I don't believe in newspaper doctoring, and so will not endorse the remedy. However, for a score of fair and square, needed practical household purposes, spirits of ammonia is invaluable, and I'm not afraid to proclaim it. Farmers and chemists are profound concerning the native article in its free state, and admit its all-important service in the economy of nature ; but farmers' wives throughout the country really know very little of the manifold uses that can be made of a pint of the spirits "kept in the house," bottled and labelled. I say emphatically, labelled, because it is a sin not to have all such things so conspicuously marked that no mistakes need occur. Let me add here, by way of caution, that ammonia directly applied is not good for the eyes. It has a way of melting them that is anything but agreeable.

Seasonable Receipts.

MINCED MEAT.—Five pounds of beef or tongue, two pounds of suet, seven pounds of sugar, seven pounds of apples, three pounds of raisins, three pounds of currants, three nutmegs, two ounces of cinnamon, a desert spoonful of ground allspice, one small teaspoonful of ground mace, the juice of two lemons, and the grated rind of one; moisten it with equal portions of wine and cider, brandy to the taste. Boil the meat in water which has been salted in the proportion of one teaspoonful of salt to every quart of water. When it is tender stand it away to get it perfectly cold before it is chopped. Wash, pick, and dry your currants, prepare the spices, and seed the raisins. Pare and core the apples, chop them fine, chop the meat very fine, add the fruit, sugar, and spice, lemon juice and grated lemon rind, also the brandy and wine. Mix the whole thoroughly; it will be fit for use the following day. If you wish to keep your minced meat for several weeks, chop the meat and add the currants, raisins, sugar and spice, but leave out the apples, lemon, wine and cider; mix the other ingredients, and merely moisten it with brandy; pack the mixture tightly in a stone jar, and cover it close. When you wish to make it into pies, take out some of the meat, chop your apples, and mix with it in the proportions given above. Moisten with cider, and add wine and brandy to your taste.—*Practical Planter.*

TO PREPARE LARD TO KEEP.—To one gallon of lard, before it is rendered, add one ounce of sal. soda, dissolved in a gill of water. Do not fill your pots more than half full, as the soda makes it foam and boil over. No other water is required than that in which the soda is dissolved. When your lard is done it will be as clear as spring water—no foam—and the cracklins will be eaten up. Strain through a coarse cloth into jars, and set to cool. Lard put up in this way will keep for two years, hard and firm, throughout the summer.—*South-Land.*

BUCKWHEAT CAKES are many times better and more wholesome when made light and *thin*. At night mix the flour with milk—warm water, a little salt, and a half a teacupful of good yeast into rather a stiff batter, and set it in a warm place to rise. In the morning thin the batter with milk, and add soda dissolved in hot water. They should not be baked up wholesale and pitched into a deep dish—that makes them heavy, but laid in neat piles on a flat plate, and baked as fast as needed at the table.

CHICKEN SALAD.—A New England housekeeper thus writes in *Hearth and Home*, I use all the meat of a tender chicken, not rejecting the dark part, as some do. An equal weight of celery is the rule, but I seldom use so large a proportion, say two-thirds of celery. For dressing, the yolks of two raw and two hard-boiled eggs, one large tablespoonful dry mustard, stirring in one direction; add a little sweet oil, stirring constantly until a third of a half-pint bottle is added, the juice of a lemon, then more oil, in all two-thirds of a bottle, a little vinegar, a teaspoonful or more of salt. This must be made very slowly and stirred a long time. I have had it so white that it looked like rich cream, and so stiff as to hold the spoon upright in the bowl. It is about perfect for a salad of any kind. I do not mix salad until just before it is to be set upon the table, but the dressing may be made several hours before using, if kept covered.

TO SEASON SAUSAGE MEAT.—For thirty pounds of meat, eight ounces of pepper, and two teacups of sage. The following is a tried and convenient receipt: To one pound of meat add one tablespoonful of salt, one teaspoonful of black pepper, one teaspoonful of sage; mix well. To any given number of pounds of meat, count the spoonfuls of seasoning as above directed.—*Exchange*.

SALVE FOR CHAPPED LIPS AND HANDS.—Take two ounces of white wax, one ounce of spermaceti, four ounces of oil of almonds, two ounces of honey, quarter of an ounce of essence of bergamot, or any other scent. Melt the wax and spermaceti; then add the honey, and melt all together, and when hot, add the almond oil by degrees, stirring it till cold. This is superior to glycerine for chapped hands, sun-burns, or any roughness on the skin.

OYSTER PIE.—Take a deep pan and line it with pie crust, or puff paste; put it in the oven to bake; when done, fill the pan with oysters that have been washed nicely; put in pepper, salt, and a half cup of butter; dredge flour over them and cover with puff paste rolled thick; when the top crust is done the pie is ready for the table.

“Vill you dake sunding?” said a German teetotaler to a friend, while standing near a tavern. “I don’t care if I do,” was the reply. “Vell, den, let’s take a walk.”

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Editorial Department.

Salutatory.

The announcement was made in the October number that this journal had changed hands. Having taken entire control, I respectfully announce myself as Editor and Proprietor of the *Southern Planter and Farmer*.

It is with no little distrust that I have assumed the management of a first class agricultural journal. My position is the more embarrassing when I remember that all of my predecessors were gentlemen widely and favorably known from their connection with the great interests of agriculture. By their excellent management the exalted reputation of this journal has been established throughout the country, and in many quarters it is held as authority on the subjects it undertakes to represent. The duty devolves upon me to maintain, if possible, this high and influential standard.

I forbear to make any promises of what I will do in carrying out this purpose, preferring that the journal shall "speak for itself." It is proper to state, however, that I will be assisted by several gentlemen of ability and experience, whose names do not appear, but whose contributions will be readily recognized by all who have been accustomed to consult the pages of the *Planter*. Other regular contributors will be secured hereafter. Whatever improvements experience may suggest will be introduced. In short, no effort will be spared to make the *Southern Planter and Farmer* the leading agricultural monthly of this country.

Its pages are always open to those who wish to impart or elicit information on any agricultural question. All who may desire to aid in the promotion of our industrial interests are cordially invited to send us communications.

All communications for the *Southern Planter and Farmer*, on any business connected with the journal, should be addressed to

JOHN W. RISON,
Editor and Proprietor Southern Planter and Farmer,
No. 2 Columbian Block, Richmond, Va.

To Our Subscribers.

We hope that our subscribers will exert themselves to enlarge the subscription list of the *Planter*. They can "do much good" in this direction by suggesting to their neighbors, who are not subscribers, the importance of sending in their names and the amount of subscription. Let every subscriber forward us at least one additional name, and we will commence the New Year with brightened hopes and stronger resolves.

Acknowledgments.

The Proprietor takes this opportunity to express his grateful acknowledgments to his friends of the press for the many kind words of encouragement which they have extended to him in their notices of the change of proprietorship. He assures them that he will studiously endeavor to fulfill their friendly predictions.

The Crops Abroad.

The Philadelphia *Ledger* thinks it is extremely probable that for some time to come there will be a large demand abroad for American grain and breadstuffs. The reports of this year's crops in Europe indicate less than an average yield. In England, the wheat is not only deficient in quantity but poor in quality, and it is anticipated that a hundred million bushels will have to be imported this winter to supply the deficiency. The English potato crop is short, although the Irish crop is an average one. From the Continent the reports are better than those from England, but at the same time no ability is indicated to supply the English deficiency. The late war seriously interfered with agricultural operations in both France and Germany, and this has produced there an exceptional demand for grain. Where crops are grown they are good, but the surface cultivated is not sufficient to supply the home demand, so that both countries will be importers. One of the natural sources of supply of Europe in such cases, would be the corn-growing region embracing Hungary, the Danubian Principalities, Southern Russia, and Austria, but from these districts the reports generally indicate small crops, Roumania being the only Danubian province likely to produce a full yield. Hence Europe, always an importer of wheat and corn from America, will, this winter, make an unusually heavy demand upon us.

State Chemist.

The farmers of the State of Tennessee are endeavoring to induce the Legislature to appropriate a sum of money sufficient to employ a chemist, whose duty it shall be to aid in the improvement of agriculture. It is proposed to have him analyze the best as well as the poorest soil of the State, in order to show what causes the fertility of the one and the barrenness of the other. It is also proposed that attention be given to ascertaining the comparative value of different manures, and of waste products, that may be made available for the purposes of agriculture.

The Constitution of Virginia (Art. IV., Sec. 16) gives the General Assembly "power to establish a Bureau of Agriculture and Immigration," and we hope to see the day when this provision may be carried into successful operation. An analysis of Virginia soil would come within the province of such a bureau.

The County Agricultural Fairs.

It affords us great pleasure to chronicle the gratifying success of the Agricultural Fairs held, during the month of October, in the counties of Pulaski, Wythe, Rockbridge, Campbell, Augusta, and Frederick. The exhibition of cattle at most of these Fairs has never been surpassed in Virginia. The success of the fairs was owing, in no small degree, to the harmonious arrangement of the order in which they were held. Exhibitors were thus enabled, in several instances, to go from one Fair to another, thereby increasing the attractiveness of each—a system which should be observed, as far as practicable, every year.

The Fairs at Petersburg and Danville were held simultaneously. When this paragraph was written we had no reports from either place, but do not doubt that the Fairs were, in every respect, as successful as those which preceded them. The last county Fair in this State will be held at Boynton, in Mecklenburg county, on the 8th of November.

Premiums for Essays.

The Ohio Agricultural Society offers premiums of \$100 each for the best essays on the following subjects: History and description of the best milk cattle, together with the directions founded on actual practice, giving full description of the characteristic indications of the best milkers. Also, directions founded upon the practice for breeding, rearing, feeding and managing. History and description of the best breed of sheep profitable to the farmer, both for carcass and fleece, and adaptation to Ohio climate an system of agriculture, together with directions founded upon actual practice of breeding, rearing, fattening, etc. History and description of the best strain of farm horses, together with directions founded upon practice, of rearing, breeding, managing and educating, or breaking the young. The best practical means of preserving and restoring the forests of Ohio. The reports are to be sent to the Secretary's office in Columbus, before the first of January, 1872, at which time the rewards will be made by a committee of the board.

Wire Grass.

Mr. Editor,—Will not you, or some of your many readers, give us some plan for killing Wire Grass? It has ruined our garden, and is about to ruin our entire farm. The farmers here say there is positively no killing it, but we believe there *is something* that will kill it, if known. We have heard it affirmed that salt, if rightly applied, would kill it. We have tried, by way of experiment, salt and kerosine oil together, and they certainly *will* kill it, but the question is, don't they cost too much? and isn't there a cheaper way of killing it? If you would bring the subject to notice, and free discussion among the farmers, I am sure you would confer a favor upon many of your subscribers, who are giving up their farms, and themselves, on account of this pestersome and obstinate wire grass.

We sincerely hope some one may be able to give us some plan for its total destruction.

H. W. C.

Halifax Co., September 14th, 1871.

"IN UNION THERE IS STRENGTH."—We have occupied considerable space in this number of the *PLANTER* with the proceedings of the "Agricultural Congress" in Nashville, and of the Executive Committee of the State Agricultural Society, in favor of more concert of action among agriculturists. We are glad that this subject is engaging such general attention at this time, and trust that the movements which have been inaugurated to promote State and National co-operation among the farmers will be eminently successful.

RECENT LAND SALES IN VIRGINIA.—Mr. D. M. Digges, land agent at Gordonsville, has recently sold farms in Albemarle county, to Dr. Robert Bird, a native of Scotland, but for the last sixteen years a surgeon in the civil service of the British army; to Mr. Sam'l P. Wilson, of Pennsylvania, and to Mr. John Michels, of England, all of whom have taken possession. Mr. D. is hopeful, from the increased inquiries, to report a great improvement in the business.

FREIGHT ON MANURE.—One of our contemporaries says, that if our railroad corporations were animated by the same broad principles of self-interest which govern the directors of the English roads, they would carry manure, even lime and plaster, at a mere nominal toll, well knowing that only manure can increase the freight of those farm products, the transportation of which alone supports the road.

A GOOD SUGGESTION.—Our contemporary, the *Farmers' Gazette*, makes a suggestion in regard to small premiums awarded by the State Agricultural Society, which has our hearty concurrence. The suggestion is, that instead of offering small amounts of money for premiums, the Society should substitute a year's subscription to a home agricultural paper. The advantages are thus succinctly stated:

1st. The Society would aid in disseminating that information for which it was established. 2d. The people would be benefitted by reading the journals. 3d. The papers would receive that material assistance which they all need, thus resulting in practical good all around.

New Publications Received,

We have only time and space in this issue of the *PLANTER* to acknowledge the publications received during the month of October, viz :

Blackwood's Magazine for October : Leonard Scott Publishing Co.

Transactions of the Wisconsin State Agricultural Society, 1870, 519 pages.

Phrenological Journal and Life Illustrated, for Nov. 1871. S. R. Wells, New York. \$3 per year.

Printers' Circular, R. S. Menamin, Phila. \$1 per year.

Wood's Household Magazine for Nov. S. S. Wood & Co., Newburgh, N. Y. \$1 per year.

Oliver Optic's Magazine. Lee & Shepard, Boston. \$2.50 per year.

Church's Musical Visitor. Cincinnati. A new and excellent musical magazine. \$1 per year.

Peters' Musical Monthly. New York. \$3 per year. An old favorite.

Schedules of premiums of Fairs in Louisiana, Texas and Tennessee.

CATALOGUES AND TRADE LISTS.

From Hopes, Brother & Thomas, West Chester, Pa. ; J. Wentz & Co., Rochester, N. Y. ; Wood & Hall, Geneva, N. Y. ; "How to Start a Nursery," W. F. Heikes, Dayton, Ohio ; "Ashes," Higgins, Reybold & Co., Delaware City, Delaware.

[This department will receive more attention in future issues.]

MISCELLANEOUS.

Don't Leave the Farm.

Come, boys, I have something to tell you,
Come near ; I would whisper it low—
You are thinking of leaving the homestead,—
Don't be in a hurry to go !
The city has many attractions,
But think of the vices and sins ;
When once in the vortex of fashion,
How soon the course downward begins !

You talk of the mines of Australia—
They're wealthy in gold without doubt ;
But ah ! there is gold on the farm, boys,
If you'll only shovel it out.
The mercantile trade is a hazard,
The goods are first high and then low ;
Better risk the old farm awhile longer—
Don't be in a hurry to go.

The great busy West has inducements,
And so has the busiest mart,
But wealth is not made in a day, boys—
Don't be in a hurry to start !
The bankers and brokers are wealthy ;
They take in their thousands or so—
Ah think of the frauds and deceptions—
Don't be in a hurry to go.

The farm is the safest and surest,
The orchards are loaded to-day ;
You are as free as the air of the mountains,
And monarchs of all you survey.
Better stay on the farm awhile longer,
Though profits come in rather slow ;
Remember, you've nothing to risk, boys—
Don't be in a hurry to go.

A Pennsylvania man found two turkey eggs, as he thought, in the woods and set them under one of his hens. They were hatched out eagles.

Useful Suggestions.

GOATS AND RATS.—A correspondent of the *Germantown Telegraph* says: Being sadly plagued with rats about my house and farm buildings, I tried in vain to catch them; they are too cunning to be trapped, and to lay poison I dare not for fear of killing my dogs, cats, and hogs, and to wait for them with a gun was a loss of too much time, though I have dropped three at a shot. At last I purchased two goats, which I kept about my fold, barn and stables the pig styes being in the fold. In a short time all the rats emigrated—they evacuated the place, cleared right out, every Jack of them, and I have not seen a single rat about the place for upwards of three years, but my neighbors who are within eighty rods have plenty of all sizes and ages. Perhaps it is not generally known that where there are many horses stabled together very little sickness prevails if there is a goat kept about the yard and stables.

DISPOSING OF STONE.—Here and there a large boulder still haunts the fields. The easiest way to dispose of such is to bury them. If the material is needed for building purposes, blasting would be resorted to, but most farms would today present a better appearance, and be less infested with weeds, if they had originally possessed no stone to make into tumble-down walls or unsightly buildings. What to do with the stone annually taken from the cultivated fields, is a question that often puzzles the farmer, and too frequently he solves it by dumping them into the fence corners. Better bury them. Select a low, wet spot—a sink-hole, perhaps—throw out some dirt from the bottom, and dump the stones in. Then cover them with the dirt, and you have mended a wet spot, got rid of the stones, and yet placed them where, if future necessity requires, they may be available.—*Am. Rural Home*.

TO REMOVE FOUL AIR FROM WELLS.—It is well known that many accidents occur to persons going down into wells to clean them, owing to the noxious gas in such places. To remove the gas before descent is made into any well, a quantity of burned but unslaked lime should be thrown down. This, when it comes in contact with whatever water is below, sets free a great quantity of heat in the water and lime, which rushes upward, carrying all the deleterious gas with it; after which the descent may be made with perfect safety. The lime also absorbs carbonic acid in the well. Always lower a light before descending; if it is extinguished, there is still danger of suffocation.

COAL ASHES FOR WALKS.—To three bushels of coal ashes, not sifted very fine, add one bushel of very fine gravel. Add water to these, and mix them until they become about as soft as mortar. Spread over the walks, the surface of which should be previously slightly broken and raked smooth and even, by spreading it with a piece of board. It will become hard in a few days.—*Household*.

CUTTING GLASS.—Any hard steel tool will cut glass with great facility when kept freely wet with camphor dissolved in turpentine. The ragged edges of glass vessels may also be thus easily smoothed by a flat file.—*Boston Journal of Chemistry*.

Good Health.

SALT—ITS EFFECT ON THE BLOOD.—Dr. Stevens, a French physician and surgeon, saw a butcher killing a pig. He observed that he stirred the blood of the animal, and added a handful of common salt to it, while stirring, which immediately made it crimson; and on stirring being discontinued, the blood remained fluid. The change of the color of the blood awakened his curiosity. The butcher could give no explanation of the phenomenon except that it kept it from jellying and spoiling. Dr. Stevens seized a vessel, caught some blood, and made several experiments by putting salt in it, and found that the blackest blood was instantly changed to a bright vermillion by salt. “Oh!” said he, “here is a fact which may lead to a practical rule.”

He had observed in cases of yellow fever in the army, that the blood drawn was very black and fluid, and on adding salt it became vermillion, and retained its freshness; whereas putridity of the blood is one of the characteristics of the yellow fever. He, therefore, abandoned the usual mode of treating it, and gave his patients a mixture of various salts, and in a very short time reduced the mortality of fever in the West Indies from one in five to one in fifty.—*Am. Farmer.*

CELERY.—Many persons become so much affected with nervousness, that the least annoyance greatly agitates them, and when they stretch out their hands they shake like aspen leaves on windy days. By a daily, moderate use of the blanched stalks of celery as a salad, they may become as strong and steady in limbs as other persons. Every one engaged in labor weakening to the nerves, or afflicted with palpitation of the heart, should use celery daily in season, and onions in its stead, when not in season.—*Educational Gazette.*

HOW TO CURE A COLD.—As the season for colds is now upon us, it may interest our readers to learn what high medical authority says is the best treatment of these troublesome attacks. The advice is to eat nothing at meals but a piece of toast, drink freely of cold water, walk twice a day till you are in a gentle perspiration, and go to bed very early.—*Fred. Herald.*

Fact, Fancy and Humor.

NOTHING LIKE GRAMMAR.—*Harper's Magazine* tells of a boy named Bob L., who was called on at school to parse the sentence, “Mary milks the cow.” He commenced thus: “Cow is a noun, feminine gender, third person, and stands for Mary.” “Stands for Mary!” said the excited professor, “how do you make that out?” “Because,” answered the noble pupil, “if the cow didn’t stand for Mary, how could Mary milk her?”

EXPLOSIVE EGGS.—A California paper recently announced that there is a hen on Griffin’s ranch that lays explosive eggs—that is to say, her eggs burst immediately after they are laid. The explanation was afterwards given, that the hen in question is in the habit of roosting on the limb of a locust tree, about twenty feet from the ground, and she lays her eggs from that lofty perch. Of course they “explode” when they strike the ground.

CHIGNONS.—The *Western Rural* says that the entire clip from Mr. Loomis' fine flock of Cotswolds was taken by the manufacturers of chignons, to be employed in the manufacture of those adjuncts of the modern female toilet. Courage, ye long wool growers. A single chignon for each woman in the United States, of ordinary size, will require for their construction double the amount of long wool produced last year in the whole country.

AN INVALID once complained to his neighbor of a Shanghai which the latter kept. The bird was a terrible nuisance, and gave him no peace day or night. "But," said the sceptical owner, "my cock crows only four or five times a day. I don't see how that can annoy you so much." "Because," replied the sufferer, "you don't take into account all the times when I am expecting him to crow."

GARDENING FOR LADIES.—Make your *beds* early in the morning instead of lying thereon; *sew* buttons on your husband's shirts; do not *rake up* any grievances; protect the young and tender *branches* of your family; *plant* a smile of good temper in your face, and carefully *root out* all angry feelings; *cultivate* all womanly graces, and expect a good *crop* of happiness.—*Ex.*

CHILDREN'S SCRAP BOOK.—It is well to save childish pictures and wood cuts of various kinds—many of which give children an excellent idea of places—and paste them into an old ledger or copy-book. They help pass away many a childish hour, and are at once innocent and instructive. With the help of questions from their elders, they aid children to think.

RABBITS FOR FOOD.—They have begun in Canada to cultivate rabbits as an article of food, and in European countries, hundreds of miles of coast lands are used as rabbit warrens, and their product furnishes a cheap and nutritious food for millions, while the furs have considerable value in trade.

Indiana dogs have carried sheep stealing to such an extent that the Legislature has offered a bounty on every dog skin produced, and the honest farmers now find puppies the most profitable crop they can raise.

Machinery for the manufacture of quilted comfortables for beds has been invented and introduced in Philadelphia, performing in a few moments the work which required many days by hand.

A cranberry bog at Cotuit, Mass., it is estimated will produce 1,200 barrels of fruit this season. There are several acres that will produce 100 barrels

There are but thirty thousand land owners in all England, and one hundred and fifty of these own more than one half the territorial surface of the country.

Alameda county, Cal., raised 13,000 pounds of figs last year. There is no reason why all our Southern States should not raise figs easily and abundantly.

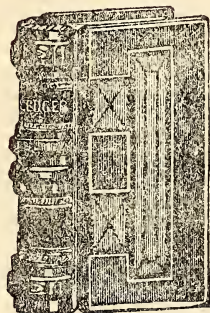
A Maryland hawk made a dash for a chicken, and pinned himself to the sharp point of the lightning rod on the farm house.

J. H. WALSH & EDWARDS,

301

AND

416



EAST

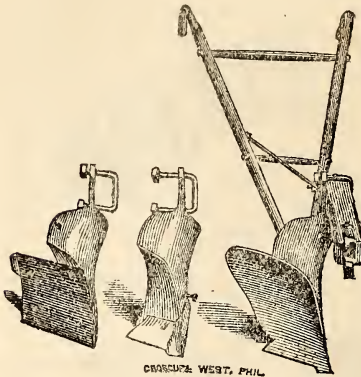
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During the months of October and November, 1870, the WATT PLOW has competed, in *closely contested field trials*, with the leading Plows of the United States, and has been awarded over TWENTY FIRST-CLASS PREMIUMS, including Diplomas, Medals, and Silver-Plate, at the following places: Macon, Eatonton, Anderson, Thomasville, and Augusta, Georgia; Charleston and Columbia, South Carolina; Raleigh and Wilmington, North Carolina.

At the Virginia State Fair there was no trial of Plows.

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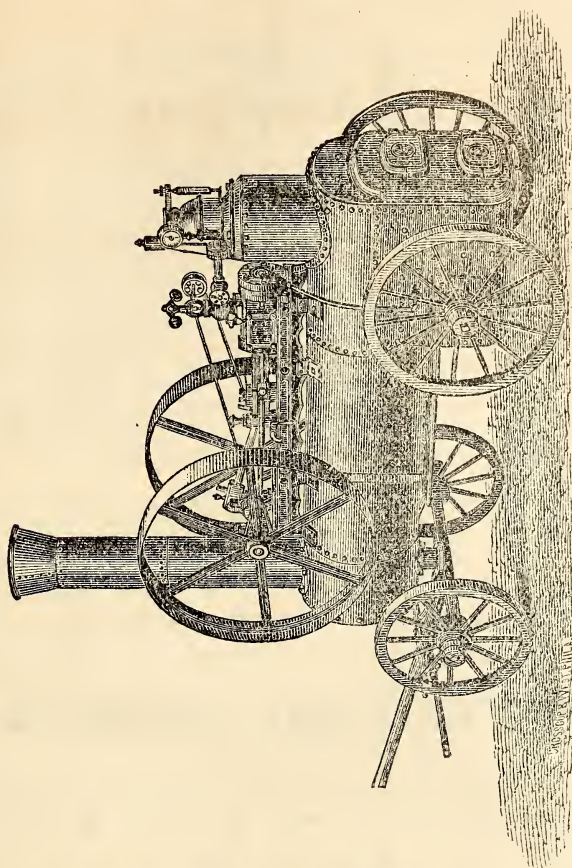
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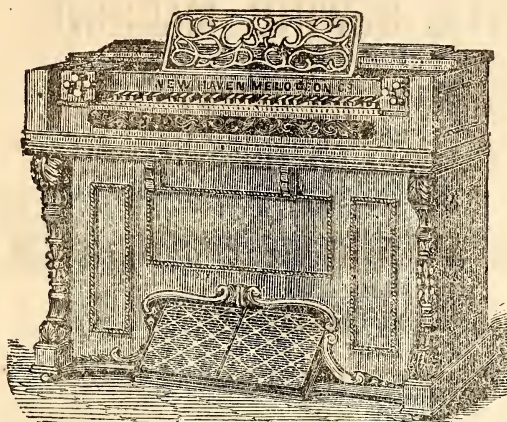
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TESTIMONIALS:

RICHMOND, VA., November 28, 1868.

Dear Sir—The "Tobacco Antidote" prepared by you according to the recipe you have submitted to me, and the ingredients of which I have examined, is purely vegetable, entirely harmless, and contains nothing in the least injurious. It is not disagreeable to the taste, and, as a home article, I hope you will meet with ready sale for it; and I believe that if the directions are followed, it will do all you claim for it.

JOHN DOVE, M. D.

PIEDMONT LIFE INSURANCE COMP'Y, Richmond, Jan. 8, 1869.

JOHN W. RISON, Esq.:

Dear Sir—Knowing many who are slaves to the use of Tobacco would like to quit it, I would recommend your "Antidote" as a sure remedy. I certify to its efficacy because, after having used Tobacco for fifteen years, I was enabled to quit it without inconvenience after using your "Antidote," and have now no desire or taste for Tobacco.

W. C. CARRINGTON.

TESTIMONY FOR RISON'S TOBACCO ANTIDOTE,

Selected from some of the most reliable Papers published in Virginia and other States.

From the Central Presbyterian.

The Tobacco Antidote of our friend, Mr. Rison, has already found a wide-spread demand, and its sale is rapidly extending. An order was filled last week from one house in New York for 2,880 boxes. * * * * They come in also from New Orleans, from Texas, and various other quarters. We have no interest in recommending this preparation except, first, the desire to promote the interest of a most worthy gentleman, in whose integrity the whole community places the highest confidence. * * * * Next, and chiefly, our wish is to aid those who desire to free themselves from bondage to a habit which few will assert to be beneficial. * * * * We wish it great success on account of the inventor, and most for the good it may be expected to effect.

From the Lynchburg News.

We invite attention to the Tobacco Antidote prepared by John W. Rison, of Richmond, Va., and for sale by Falkner & Craighill, of this city. A "tobacco worm" ourself, since we were fifteen years of age, we take pleasure in stating that a week's use of the Antidote has entirely destroyed all desire or taste for tobacco in any form whatever. Those who knew our fondness for a "chaw" or "puff" can judge of the complete efficacy of the Antidote in the cure it has effected in a bad habit to which we feared we were a complete slave, but which, thanks to Mr. Rison, we are now wholly freed from. We unhesitatingly advise all who wish to quit the use of tobacco to try the Antidote. It will do everything that is claimed for it.

From the Richmond Dispatch.

Rison's Tobacco Antidote, manufactured by John W. Rison, of this city, is already attracting very general public attention, and the rapidly increasing sale is the best evidence that can be furnished of its real value as an antidote against the craving desire for tobacco. Mr. Rison is a well known druggist of this city, and we have the assurance of those who have used his Antidote that it will effect all that is promised when the directions are followed.

From the Richmond Whig.

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oct—1y

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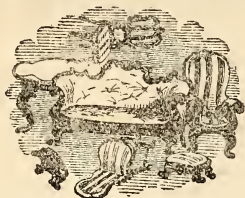
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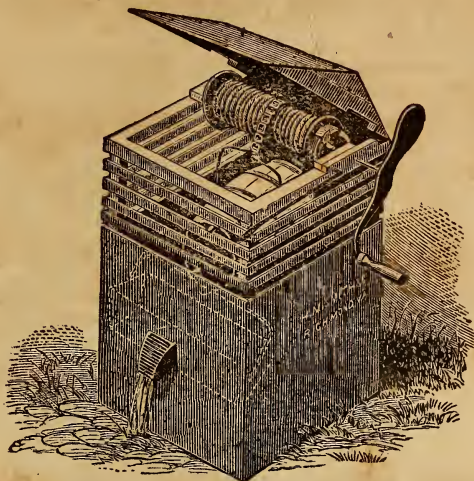
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